



AI TONG SCHOOL

2013

CONTINUAL ASSESSMENT 1

PRIMARY 6

MATHEMATICS

Paper 1

(Booklets A and B)

DURATION : 50 min

DATE : 5 March 2013

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are not allowed to use a calculator.

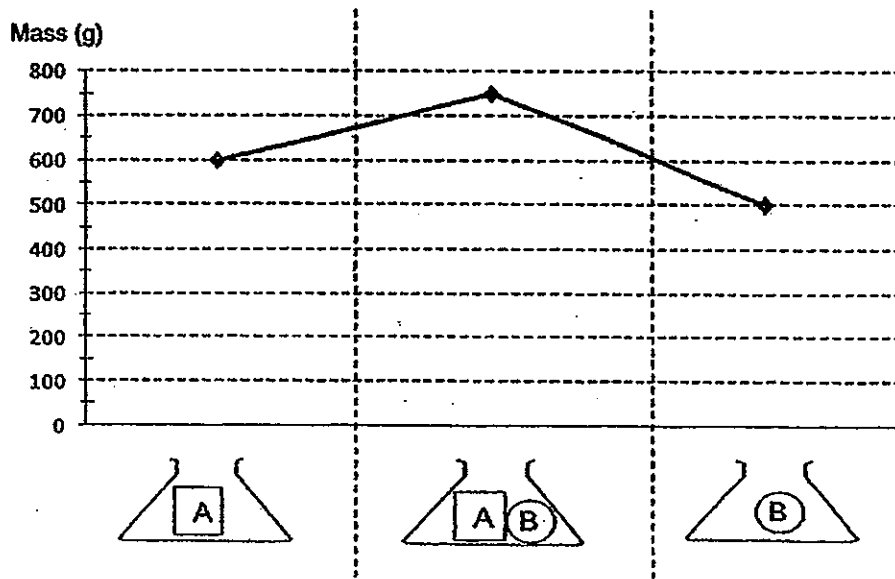
Name : _____ ()

Class : Primary 6 () / 6M ()

Parent's Signature : _____
Date : _____

Paper 1	40
Paper 2	60
Total	100

Use the line graph below to answer questions 4 and 5.
 The line graph shows the mass of 3 similar containers with different object(s) placed in each of them.



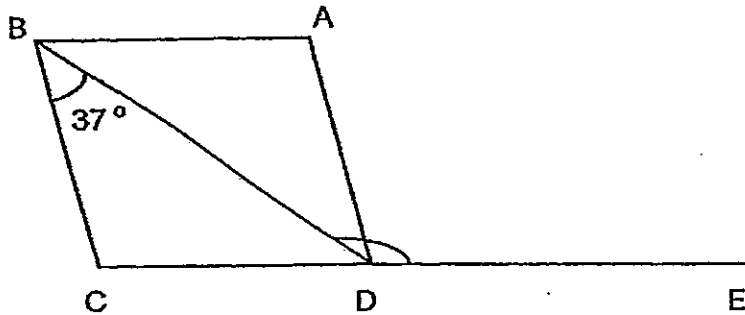
4 What is the total mass of object A and object B with the container?

- (1) 600 g
- (2) 750 g
- (3) 800 g
- (4) 1100 g

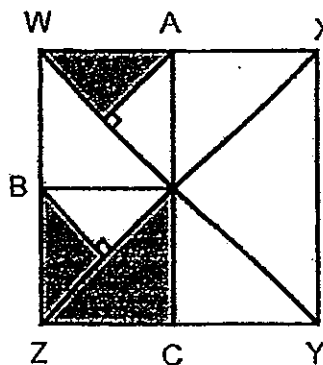
5 What is the mass of the container when it is empty?

- (1) 150 g
- (2) 250 g
- (3) 350 g
- (4) 450 g

- 6 The figure below is not drawn to scale. ABCD is a rhombus. Given that CDE is a straight line, find $\angle BDE$.



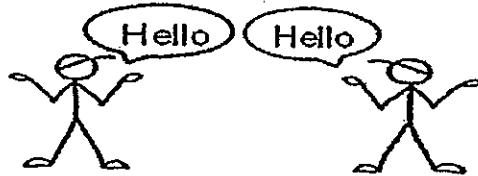
- (1) 116°
 (2) 127°
 (3) 133°
 (4) 143°
- 7 The price of an apartment when rounded off to the nearest \$1000 was \$431 000. Which of the following is a possible actual price of the apartment?
- (1) \$430 456
 (2) \$430 634
 (3) \$431 546
 (4) \$431 913
- 8 The figure below shows a square, WXYZ. A, B and C are the mid-points of lines WX, WZ and YZ respectively. What percentage of the figure is shaded?



9 Amir has as many \$2 notes as \$5 notes in his piggy bank. Given that the total amount of money in his piggy bank is \$140, how many \$5 notes does he have in his piggy bank?

- (1) 14
- (2) 20
- (3) 35
- (4) 40

10 8 people met at a party and they said "Hello" to each other once. How many times was the word "Hello" being said?



- (1) 28
- (2) 36
- (3) 56
- (4) 72

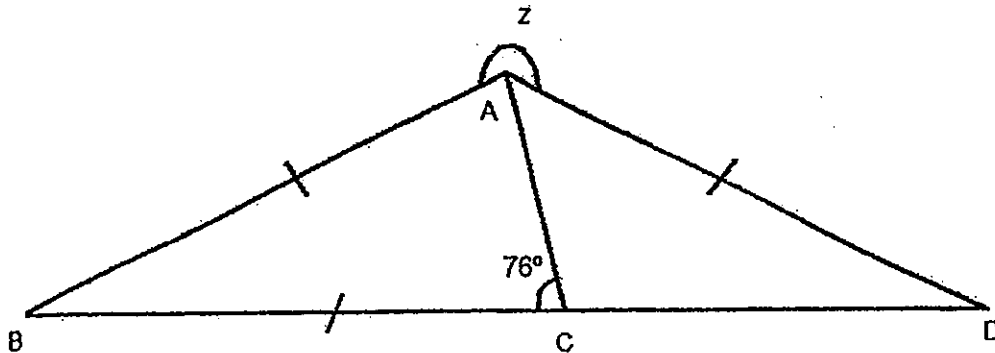
11 Find the value of $7 - a + 12 + 6a$ when $a = 6$.

- (1) 41.0
- (2) 42.5
- (3) 77.0
- (4) 79.5

12 The total score of 5 pupils in a Mathematics test is 431. Two pupils scored 82 marks each. What is the average score of the remaining 3 pupils?

- (1) 86
- (2) 89
- (3) 164
- (4) 267

- 13 The figure below is not drawn to scale. Given that $AB = BC = AD$, find $\angle z$.



- (1) 198°
(2) 208°
(3) 234°
(4) 236°
- 14 The number of male workers in a factory was 45% of the number of female workers. After 72 female workers resigned, the ratio of the number of female workers to the number of male workers became 4 : 3. How many more female workers than male workers were there at first?
- (1) 81
(2) 99
(3) 108
(4) 180
- 15 Billar weighs $(2w + 5)$ kg heavier than Allan. Billar weighs 3 kg less than Collin. If Allan weighs 59 kg, what is Collin's weight in terms of w ?
- (1) $(51 + 2w)$ kg
(2) $(54 + 2w)$ kg
(3) $(64 + 2w)$ kg
(4) $(67 + 2w)$ kg

Booklet B

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (10 marks)

16 If $\frac{3}{7}$ of a number is 105 what is the number?

Ans: _____

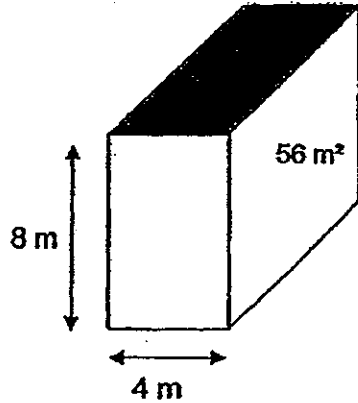
17 Find the value of $521 - 29.7$.

Ans: _____

18 Write $8\frac{5}{9}$ as a decimal correct to 1 decimal place.

Ans: _____

- 19 The area of one of the faces of the cuboid below is 56 m^2 . Find the area of the shaded face of the cuboid.



Ans: _____ m^2

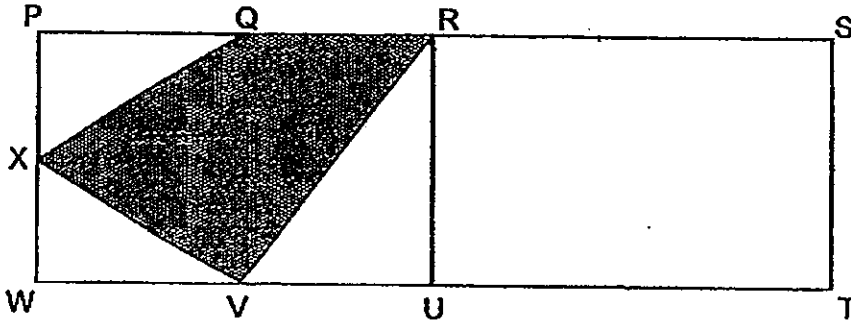
20 $(9 + 4r) \text{ kg} =$ _____ g

Ans: _____ g

- 21 2 years ago, Wen Li's age was 12 years 8 months. What is her age in 9 months' time?

Ans: _____ years _____ months

- 22 Rectangles PRUW and RSTU are identical. Points Q, V and X are mid points of PR, UW and PW respectively. What fraction of the figure PSTW is shaded?



Ans: _____

- 23 A machine can print 85 copies of magazines in 20 minutes. How many copies of magazines can the machine print in 1 hour?

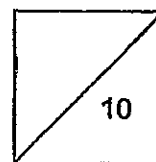
Ans: _____

- 24 Express $\frac{4}{5}\%$ as a fraction in the simplest form.

Ans: _____

25 Simplify $10p + 16 - 18p + 2 - 2$.

Ans: _____

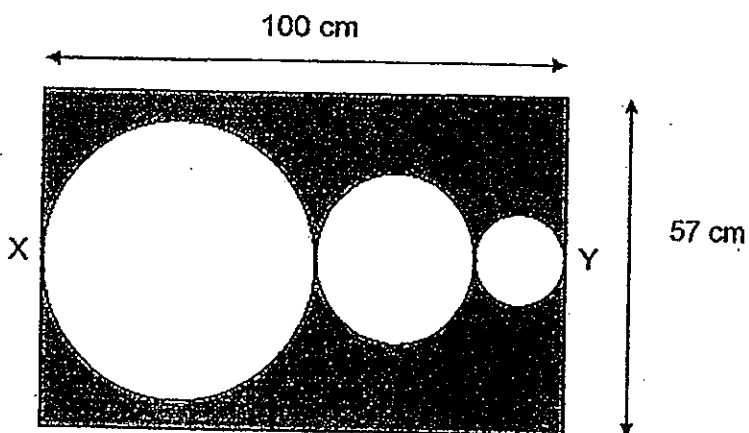


Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 26 A packet of jelly beans cost \$ 12. Guo Ming bought 8 packets of jelly beans and 12 boxes of chocolates. He could also buy 18 boxes of chocolates with the same amount of money. How much did each box of chocolates cost?

Ans: \$ _____

- 27 The figure below is not drawn to scale. It is made up of 3 different circles and a rectangle. Line XY cuts the centre of all 3 circles. Find the perimeter of the shaded part. ($\pi = 3.14$).



Ans: _____ cm

- 28 Tim took $\frac{1}{5}$ hour to run one round around a circular track. How many complete rounds can he run in $\frac{5}{6}$ hour?

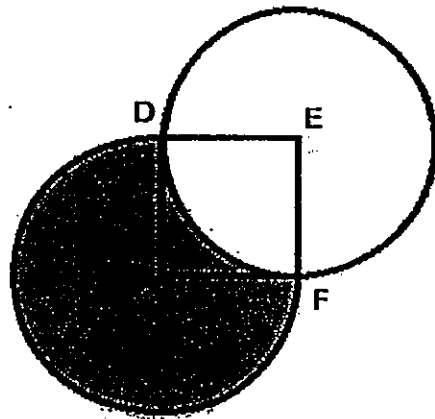
Ans: _____

- 29 Ribbon A and Ribbon B were of the same length at first. After cutting 9.4 m from Ribbon A and 6.7 m from Ribbon B, the length of Ribbon B was 1.5 times that of Ribbon A. Find the original length of each ribbon.

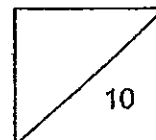
Ans: _____ m

30 The figure below is made up of 2 identical circles with centres C and E and a square CDEF. The diameter of the circle is 28 cm.

Find the area of the shaded part. ($\pi = \frac{22}{7}$)



Ans: _____ cm²



**END OF PAPER
CHECK YOUR WORK CAREFULLY !**



AI TONG SCHOOL

2013

CONTINUAL ASSESSMENT 1

PRIMARY 6

MATHEMATICS

Paper 2

DURATION : 1 h.40 min

DATE : 5 March 2013

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are allowed to use a calculator.

Name : _____ ()

Class : Primary 6 () / 6M ()

Parent's Signature : _____
Date : _____

Total	60
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Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

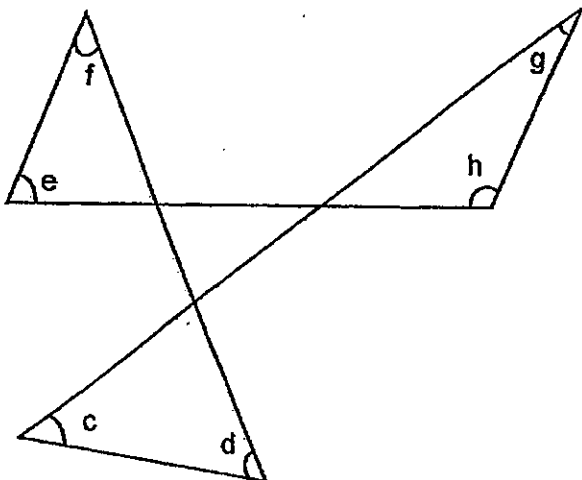
Do not write in this space

(10 marks)

- 1 The length of Pole A is $\frac{5}{7}$ the length of Pole B. After 36 cm was cut off from each pole, the length of Pole A is $\frac{2}{3}$ of Pole B. What is the original length of Pole B?

Ans: _____ cm [2]

- 2 The figure, not drawn to scale, shows 4 different triangles. Find the sum of $\angle c$, $\angle d$, $\angle e$, $\angle f$, $\angle g$ and $\angle h$.



Ans: _____ ° [2]

- 3 The table below shows the rate of renting a rod at Fernvale Prawning Park.

First Hour	\$19.50
Every additional $\frac{1}{2}$ h or part thereof	\$6

Ah Teck rented a rod from 10.45 a.m. to 2 p.m. How much did he pay for the rental of the rod?

Ans: \$ _____ [2]

Do not write
in this space

- 4 Suiyng and Sumei baked some cupcakes each. If Suiyng gave away $\frac{2}{5}$ of her cupcakes and Sumei ate $\frac{1}{7}$ of hers, both of them will have the same number of cupcakes left. What fraction of the total cupcakes did Sumei bake?

Do not write
in this space

Ans: _____ [2]

- 5 Caleb and Derek shared a sum of money. When Caleb's share decreased from \$1605 to \$900, the amount Derek received increased by 15%. How much did Derek receive at the end?

Ans: \$ _____ [2]

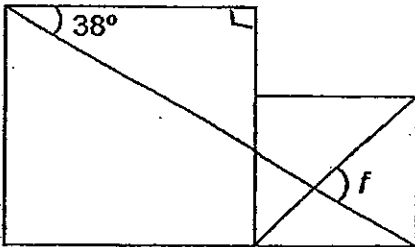
For questions 6 to 18, show your working clearly in the space provided for each question and write the answers in the spaces provided. The number of marks available is shown in the brackets [] at the end of each question or part-question. (50 marks)

Do not write in this space.

- 6 24 mugs and 15 bowls cost \$386.10. If each mug cost half as much as each bowl, find the cost of 36 mugs.

Ans: _____ [3]

- 7 The figure, not drawn to scale, is made up of 2 squares. Find $\angle f$.



Ans: _____ [3]

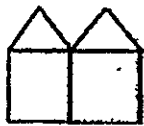
8 Grace used some matchsticks to make the patterns below.

(a) How many matchsticks were used in Pattern 4?

(b) If Grace used 131 matchsticks, which Pattern did she create?



Pattern 1



Pattern 2



Pattern 3

Do not write in
this space

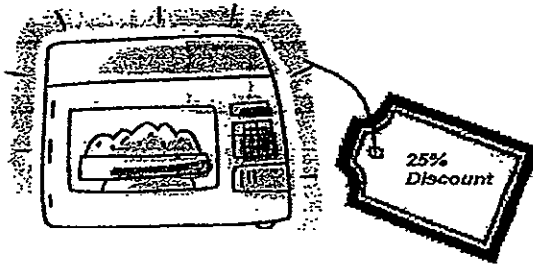
Ans: (a) _____ [1]

(b) Pattern _____ [2]

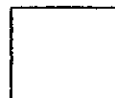


- 9 A microwave oven, inclusive of 7% GST, costs \$214. If the store is having a storewide discount of 25%, how much does Adam have to pay for the microwave oven, including GST, after discount?

Do not write in this space



Ans: _____ [4]



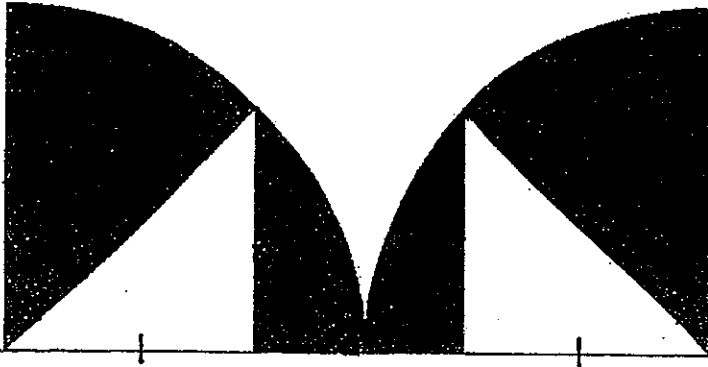
- 10 Draw an isosceles triangle RST in which $\angle RST = 66^\circ$ and $RS = RT$.
Label the triangle clearly
Measure and write down the length of RS

Do not write in
this space



Ans: _____ [1]

- 11 The figure below, which is not drawn to scale, is made up of 2 identical quadrants and 2 identical isosceles triangles. The radius of the quadrant is 20 cm. Find the total area of the shaded parts of the figure. Round off your answer to 2 decimal places.



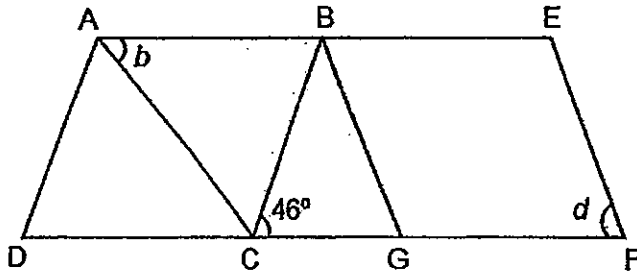
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Ans: _____ [4]



- 12 In the figure below, not drawn to scale. ABCD and BEFG are identical rhombuses. ABE and DCGF are straight lines. Find the sum of $\angle b$ and $\angle d$.

Do not write in this space

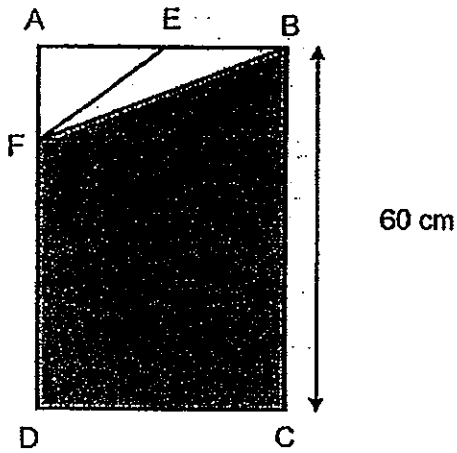


Ans : _____ [4]



- 13 In the figure below, the area of triangle BEF is 90 cm^2 and $AE=BE$
 The ratio of the length of AF and FD is 1 : 3.
 a) Find the area of the shaded part.
 b) Find the perimeter of rectangle ABCD.

Do not write in
 this space



Ans: (a) _____ [2]

(b) _____ [2]



- 14 A fruiterer had the same number of apples, pears and lemons at first. After 98 lemons, some apples and pears were sold, there were 297 fruits left. There were twice as many apples as pears left. The number of lemons left was 13 fewer than the number of apples left. How many pears were sold?

Do not write in this space

Ans: _____ [4]



15 Anna and Ben take 9 days to complete a jigsaw puzzle. Ben and Celine take 3 days to complete the same jigsaw puzzle. When Celine partners Dennis, they take 4 days to complete the jigsaw puzzle. How many days will Anna and Dennis take to complete 2 such jigsaw puzzles?

Do not write in this space

Ans: _____ [4]



16 In a car park, there are thrice as many cars as vans. The number of cars is twice the number of motorcycles. The total number of wheels these vehicles have is 4598.

(a) How many cars are parked at the car park?

(b) If $\frac{1}{3}$ of the motorcycles left the car park, how many vehicles are left in the carpark?

Do not write in this space

Ans: (a) _____ [3]

(b) _____ [2]



- 17 Every month, Andy spent $\frac{1}{5}$ of his income on food and $\frac{2}{3}$ of the remaining money on rental. After spending his income on food and rental, he gave $\frac{1}{2}$ of remaining money to his parents and had \$250 left. How much did he spend on food and rental every month?

Do not write in this space

Ans: _____ [4]



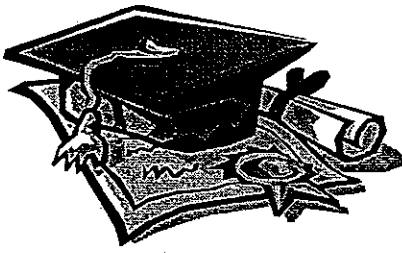
- 18 On Teachers' Day, a florist sold thrice as many roses as orchids and collected \$703 in total. She collected \$437 more for the roses than the orchids. Given that a stalk of rose cost \$1.50 more than a stalk of orchid, find the cost of a stalk of orchid.

Do not write in
this space

Ans: _____ [5]



**END OF PAPER
CHECK YOUR WORK CAREFULLY!**



ANSWER SHEET

EXAM PAPER 2013

SCHOOL : AITONG

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
1	3	3	2	3	4	2	1	2	3	2	2	4	2	4

- 16)245 17)491.3 18)8.6 19)28m² 20)(9000+4000r)
21)15 years 5 months 22) $\frac{1}{4}$ 23)255 24)1/125
25)(1P+14) 26)\$16 27)628cm 28)4 29)14.8m 30)504cm²

Paper 2

1)1unit→36cm

7units→36cm x 7 = 252cm

2)180° x 4 = 720°

720° - (180° x 2) = 360°

3)10.45 a.m to 2p.m. is 3h 15 min

\$19.50 + (5 x \$6) = \$49.50

4)5 x 2 = 10

10 + 7 = 17

7 ÷ 17 = 7/17

$$5) \$1605 - \$900 = \$705$$

$$15\% \rightarrow \$705$$

$$115\% \rightarrow \$705 \times 115/100 = \$810.75$$

$$6) 15 \times 2 = 30$$

$$24 + 30 = 54$$

$$36 \rightarrow 54 \times 2/3$$

$$\rightarrow \$386.10 \times 2/3 = \$257.40$$

$$7) 180^\circ - (90^\circ + 38^\circ) = 52^\circ$$

$$180^\circ - 52^\circ = 128^\circ$$

$$180^\circ - 128^\circ = 52^\circ$$

$$180^\circ - (52^\circ + 54^\circ) = 74^\circ$$

$$8) a) 4 \times 2 = 8$$

$$4 + (3 \times 3) = 13$$

$$13 + 8 = 21$$

$$b) 131 - 6 = 125$$

$$125 \div 5 = 25$$

$$25 + 1 = 26$$

$$9) \$214 \times 100/107 = \$200$$

$$\$200 - 25\% = \$150$$

$$\$150 \times 107/100 = \$160.50$$

$$10) 6\text{cm}$$

$$11) \text{Area of an isosceles triangle} = \frac{1}{2} \times 10 \times 20 = 100\text{cm}^2$$

$$\text{Area of half a circle} = \frac{(\pi \times 20 \times 20)}{2}$$

$$= 628$$

$$\text{Area of shaded area} = 628 - (100 \times 2)$$

$$= 428.30 \text{ (to 2dp)}$$

$$12) 180^\circ - (46^\circ \times 2) = 88^\circ$$

$$180^\circ - 88^\circ = 92^\circ$$

$$92^\circ \div 2 = 46^\circ$$

$$180^\circ - 46^\circ = 134^\circ$$

$$134^\circ \div 2 = 67^\circ$$

$$67^\circ + 46^\circ = 113^\circ$$

13)a) $60 \div 4 = 15\text{cm}$

$90\text{cm}^2 \times 2 = 180\text{cm}^2$

$180\text{cm}^2 \div 15\text{cm} = 12\text{cm}$

$\frac{1}{2} \times 24\text{cm} \times 15\text{cm} = 180\text{cm}^2$

$45\text{cm} \times 24\text{cm} = 1080\text{cm}^2$

$1080\text{cm}^2 + 180\text{cm}^2 = 1260\text{cm}^2$

b) $(60\text{cm} \times 2) + (24\text{cm} \times 2) = 168\text{cm}$

14) $297 + 13 = 310$

$(2\text{units} \times 2) + 1\text{unit} = 5\text{units}$

$310 \div 5\text{units} = 62$

$62 \times 2\text{units} = 124$

$124 - 13 = 111$

$111 + 98 = 209$

$209 - 62 = 147$

15) 72 day

16)a) $(6+2) \times 4 = 32$

$3 \times 2 = 6$

$4598 \div (32+6) = 121$

$121 \times 6 = 726\text{ cars}$

b) $121 \times 3 = 363$

$363 \div 3 = 121$

$1331 - 121 = 1210\text{ vehicles}$

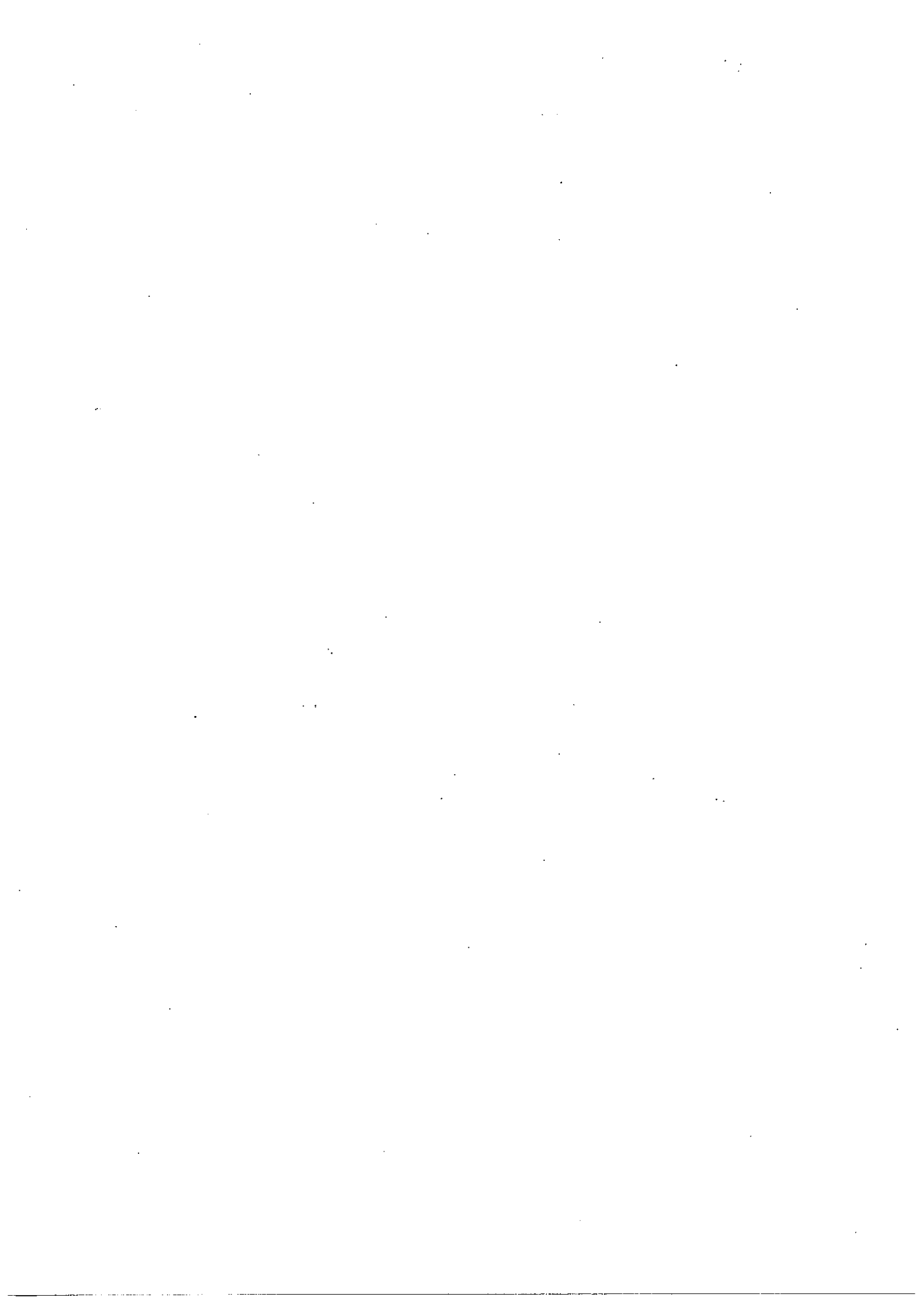
17) $\$250 \times 2 = \500

$\$500 \times 3/1 = \1500

$\$1500 \times 3/4 = \1875

$\$1875 - \$500 = \$1375$

18) $\$3.50$



METHODIST GIRLS' SCHOOL

Founded in 1887



CONTINUAL ASSESSMENT 2013 PRIMARY 6 MATHEMATICS

PAPER 1 (BOOKLET A)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

The use of calculators is **NOT** allowed.

Name: ()

Class: Primary 6.

Date: 5 March 2013

This booklet consists of 6 printed pages including this page.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

- 1 Mary spent $\$m$ on 3 pens and 6 notebooks. The 3 pens cost $\$5$. What is the cost of 1 notebook?

(1) $\$ \frac{m-15}{6}$

(2) $\$ \frac{m-15}{9}$

(3) $\$ \frac{m-5}{6}$

(4) $\$ \frac{m-5}{9}$

- 2 The breadth of a rectangle is y cm. The length is 7 cm longer. What is the perimeter of the rectangle?

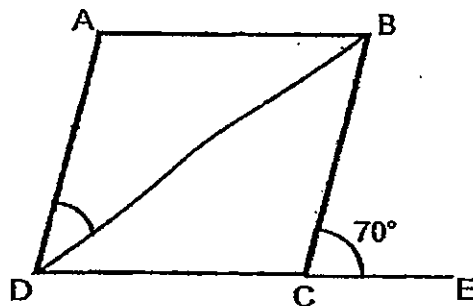
(1) $(2y + 7)$ cm

(2) $(2y + 14)$ cm

(3) $(4y + 7)$ cm

(4) $(4y + 14)$ cm

- 3 ABCD is a rhombus. DE is a straight line. $\angle BCE = 70^\circ$. Find $\angle ADB$.



(1) 35°

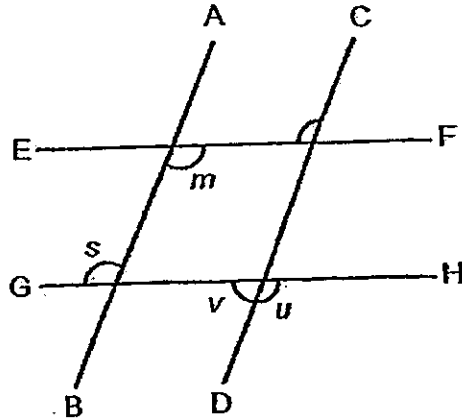
(2) 45°

(3) 70°

(4) 110°

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- 4 In the diagram below, AB is parallel to CD and EF is parallel to GH. Which angle is not equal to $\angle m$.



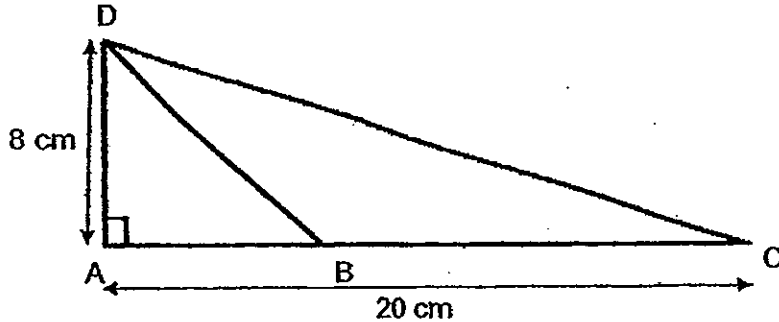
- (1) $\angle s$
 (2) $\angle t$
 (3) $\angle u$
 (4) $\angle v$
- 5 How many eighths are there in $2\frac{3}{4}$?
- (1) 9
 (2) 11
 (3) 16
 (4) 22
- 6 The mass of butter, flour and sugar are mixed in the ratio 3 : 4 : 5 to bake a cake. The mass of the cake is 720 g. Find the mass of the butter that was used.
- (1) 60 g
 (2) 180 g
 (3) 300 g
 (4) 240 g

(Go on to the next page)

- 7 Sharifah tied some pens in bundles of 45 each. There were 5 red pens and some blue pens in every bundle. What was the ratio of the number of red pens to the number of blue pens?
- (1) 1:9
 - (2) 9:1
 - (3) 1:8
 - (4) 8:1
- 8 Mr Lee nailed a square board by placing nails along all its edges. There were 25 nails along an edge of the board. How many nails did Mr Lee use altogether?
- (1) 92
 - (2) 96
 - (3) 97
 - (4) 100
- 9 The average of 3 numbers is 78. When a fourth number is added, the average of the 4 numbers is 80. What is the value of the fourth number?
- (1) 86
 - (2) 2
 - (3) 234
 - (4) 320

(Go on to the next page)

- 10 In the figure below, AC is a straight line and ABD is an isosceles triangle. What is the area of triangle BCD?



- (1) 48 cm²
 (2) 80 cm²
 (3) 96 cm²
 (4) 160 cm²
- 11 In a movie theatre, $\frac{5}{9}$ of the audience were men, $\frac{3}{4}$ of the remainder were women and the rest were children. What fraction of the audience were children?
- (1) $\frac{1}{9}$
 (2) $\frac{1}{3}$
 (3) $\frac{5}{12}$
 (4) $\frac{5}{36}$
- 12 For every blouse that Siti sells, she earns \$10. She is given a commission of \$5 for every 5 blouses sold. How many blouses must she sell to earn \$220?
- (1) 20
 (2) 40
 (3) 45
 (4) 50

(Go on to the next page)

- 13 Ahmad, Bernard and Calvin shared the cost of a meal equally. Ahmad forgot to bring his wallet so Bernard and Calvin paid for him first. The ratio of the amount of money that Bernard paid to the amount of money that Calvin paid is 7 : 11. If Ahmad returned \$25 to Calvin, how much must he return to Bernard?
- (1) \$ 5
 - (2) \$25
 - (3) \$35
 - (4) \$55
- 14 Peihua and Xinyi have 35 stickers altogether. Jenny has 5 stickers more than what Peihua and Xinyi have. What is the average number of stickers that each of them have?
- (1) 25
 - (2) 35
 - (3) 40
 - (4) 75
- 15 Ahmad receives \$200 from his mother as his weekly allowance. He spends \$70 on food, \$25 on transport and saves the rest. What percentage of his weekly allowance does he save?
- (1) 12.5%
 - (2) 35%
 - (3) 47.5%
 - (4) 52.5%

(Go on to Booklet B)

METHODIST GIRLS' SCHOOL

Founded in 1887



CONTINUAL ASSESSMENT 2013 PRIMARY 6 MATHEMATICS

PAPER 1 (BOOKLET A)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

The use of calculators is **NOT** allowed.

Name: ()

Class: Primary 6.

Date: 5 March 2013

This booklet consists of 6 printed pages including this page.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

- 1 Mary spent $\$m$ on 3 pens and 6 notebooks. The 3 pens cost $\$5$. What is the cost of 1 notebook?

(1) $\frac{\$m-15}{6}$

(2) $\frac{\$m-15}{9}$

(3) $\frac{\$m-5}{6}$

(4) $\frac{\$m-5}{9}$

- 2 The breadth of a rectangle is y cm. The length is 7 cm longer. What is the perimeter of the rectangle?

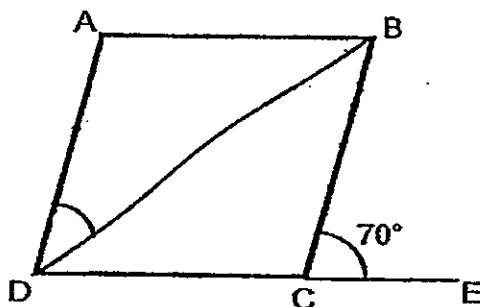
(1) $(2y + 7)$ cm

(2) $(2y + 14)$ cm

(3) $(4y + 7)$ cm

(4) $(4y + 14)$ cm

- 3 ABCD is a rhombus. DE is a straight line. $\angle BCE = 70^\circ$. Find $\angle ADB$.



(1) 35°

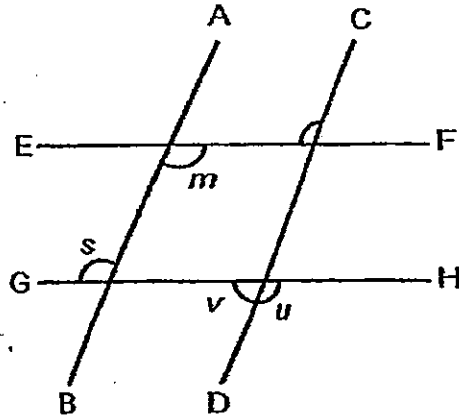
(2) 45°

(3) 70°

(4) 110°

(Go on to the next page)

- 4 In the diagram below, AB is parallel to CD and EF is parallel to GH. Which angle is not equal to $\angle m$.



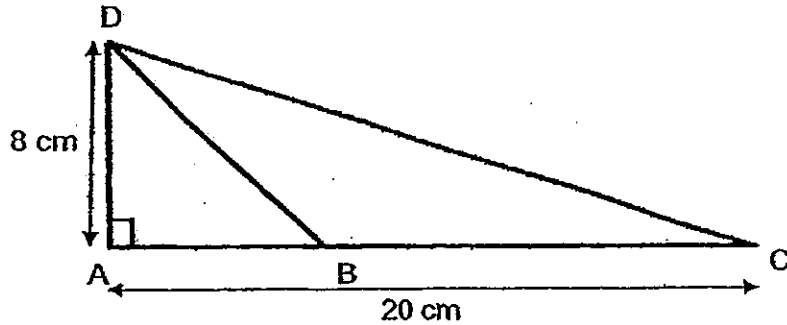
- (1) $\angle s$
 (2) $\angle t$
 (3) $\angle u$
 (4) $\angle v$
- 5 How many eighths are there in $2\frac{3}{4}$?
- (1) 9
 (2) 11
 (3) 16
 (4) 22
- 6 The mass of butter, flour and sugar are mixed in the ratio 3 : 4 : 5 to bake a cake. The mass of the cake is 720 g. Find the mass of the butter that was used.
- (1) 60 g
 (2) 180 g
 (3) 300 g
 (4) 240 g

(Go on to the next page)

- 7 Sharifah tied some pens in bundles of 45 each. There were 5 red pens and some blue pens in every bundle. What was the ratio of the number of red pens to the number of blue pens?
- (1) 1:9
 - (2) 9:1
 - (3) 1:8
 - (4) 8:1
- 8 Mr Lee nailed a square board by placing nails along all its edges. There were 25 nails along an edge of the board. How many nails did Mr Lee use altogether?
- (1) 92
 - (2) 96
 - (3) 97
 - (4) 100
- 9 The average of 3 numbers is 78. When a fourth number is added, the average of the 4 numbers is 80. What is the value of the fourth number?
- (1) 86
 - (2) 2
 - (3) 234
 - (4) 320

(Go on to the next page)

- 10 In the figure below, AC is a straight line and ABD is an isosceles triangle. What is the area of triangle BCD?



- (1) 48 cm²
 (2) 80 cm²
 (3) 96 cm²
 (4) 160 cm²
- 11 In a movie theatre, $\frac{5}{9}$ of the audience were men, $\frac{3}{4}$ of the remainder were women and the rest were children. What fraction of the audience were children?
- (1) $\frac{1}{9}$
 (2) $\frac{1}{3}$
 (3) $\frac{5}{12}$
 (4) $\frac{5}{36}$
- 12 For every blouse that Siti sells, she earns \$10. She is given a commission of \$5 for every 5 blouses sold. How many blouses must she sell to earn \$220?
- (1) 20
 (2) 40
 (3) 45
 (4) 50

(Go on to the next page)



METHODIST GIRLS' SCHOOL

Founded in 1887



CONTINUAL ASSESSMENT 2013 PRIMARY 6 MATHEMATICS

PAPER 1 (BOOKLET B)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 6. _____

Date: 5 March 2013

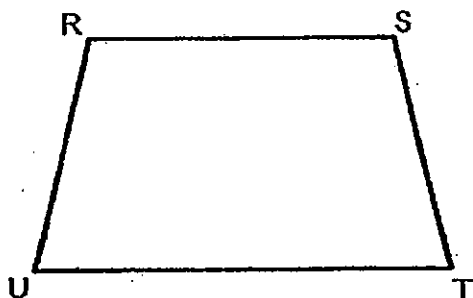
Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
TOTAL	/ 100

This booklet consists of 8 printed pages including this page.

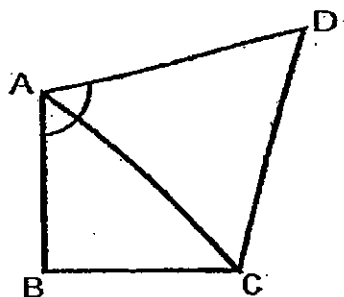
Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated.

(10 marks)

- 16 RSTU is a trapezium. Mark out on the diagram two angles which, when added together, will give a sum of 180° . Name these 2 angles f and g respectively.



- 17 ABC is a right-angled isosceles triangle and ADC is an equilateral triangle.
Find $\angle BAD$.



Ans: _____^o

(Go on to the next page)

- 18 Find the value of $\frac{8}{10} + \frac{7}{1000}$ as a decimal. Give your answer as a decimal.

Ans: _____

- 19 9 pizzas are shared equally among some girls.
How many girls are there if each girl gets $\frac{3}{4}$ of the pizza?

Ans: _____

- 20 Express $1\frac{1}{8}$ as a decimal.

Ans: _____

(Go on to the next page)

- 21 $\frac{1}{6}$ of Jason's money is equal to $\frac{2}{5}$ of Kelvin's money. Find the ratio of Jason's money to Kelvin's money.

Ans: _____

- 22 The cost of tiling a floor area of 25 m^2 is \$500. Find the cost of tiling a room with a floor area of 125 m^2 .

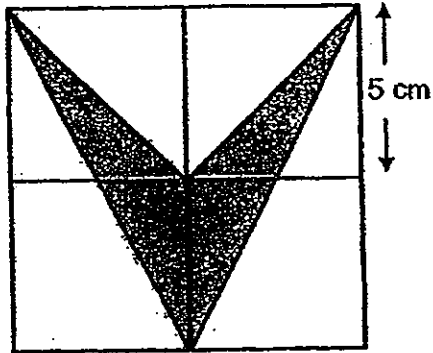
Ans: \$ _____

- 23 Ahmad has thrice as much money as Devi. If Ahmad gives Devi \$45, he will have the same amount of money as Devi. How much money does Ahmad have?

Ans: \$ _____

(Go on to the next page)

24. The figure below is made up of squares of side 5 cm. Find the area of the shaded parts.



Ans: _____ cm²

25. The ratio of the number of marbles John had to the number of marbles Ali had to the number of marbles Zainal had is 4 : 3 : 5.
Express Ali's marbles as a percentage of the total number of marbles.

Ans: _____ %

(Go on to the next page)

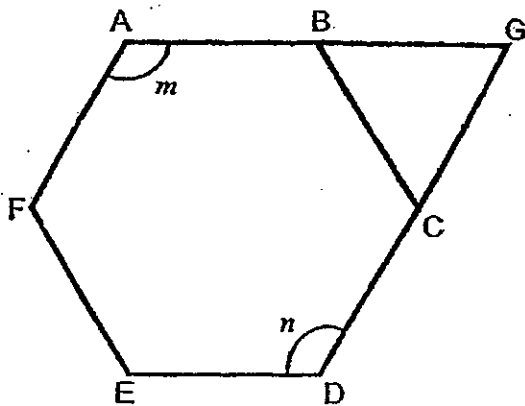
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

- 26 Jane has $\frac{2}{5}$ as much money as Rani. If Rani has \$ p more than Jane, how much money does Jane have?

Ans: \$ _____

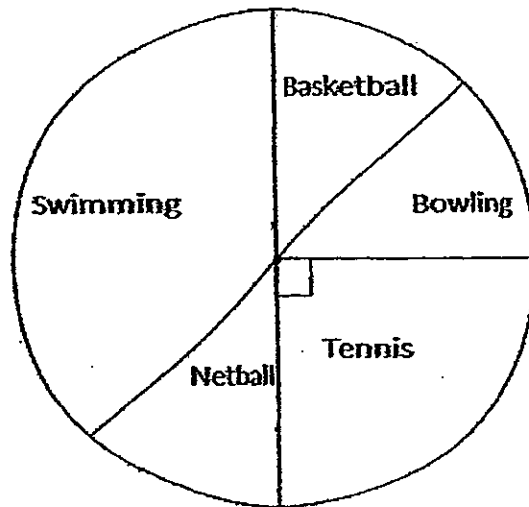
- 27 The figure below is made up of a regular hexagon, in which $AB=BC=CD=DE=EF=FA$, and an equilateral triangle BCG . What is the sum of $\angle m$ and $\angle n$?



Ans: _____

(Go on to the next page)

- 28 The pie chart below shows the favourite sports of a group of children. Half of this number of children like swimming and netball. The same number of children like Bowling, Netball and Basketball. What percentage of the number of children like swimming?



Ans: _____ %

(Go on to the next page)

- 29 A rectangular field has a perimeter of 96 m. The ratio of the length of the field to the breadth is 5 : 3. Find the area of the field.

Ans: _____ m²

- 30 The usual price of a bag was \$55. At a sale, John bought the bag at a discount of 5%. How much did he pay for the bag?

Ans: \$ _____

End of Paper

METHODIST GIRLS' SCHOOL

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CONTINUAL ASSESSMENT 2013 PRIMARY 6 MATHEMATICS

PAPER 2

Duration: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

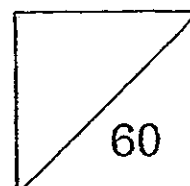
Write your answers in this booklet.

The use of an approved calculator is expected, where appropriate.

Name: _____ ()

Class: Primary 6. _____

Date: 5 March 2013



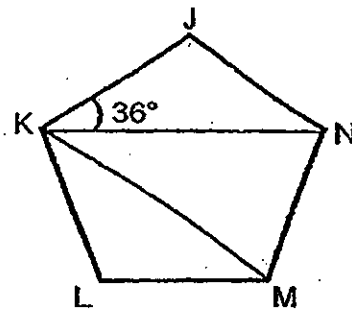
This booklet consists of 15 printed pages including this page.

Questions 1 to 5 carry 2 marks each. Show your workings clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 1 There are n yellow, red and blue marbles altogether. There is an equal number of yellow and red marbles. There are 5 more blue marbles than yellow marbles. How many blue marbles are there? Express your answer in terms of n .

Ans: _____

- 2 In the figure below, $JK = KL = LM = MN = NJ$. JN is parallel to KM . Find $\angle JNM$.



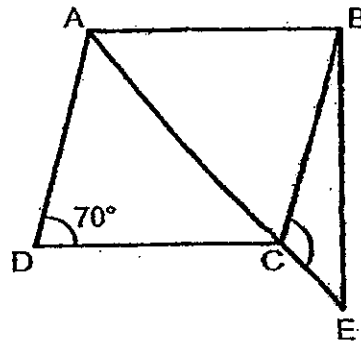
Ans: _____°

(Go on to the next page)

- 3 There are some hens, cows and goats in a farm. The ratio of the number of hens to the number of cows is 3 : 4. The ratio of the number of cows to the number of goats is 2 : 3. What is the ratio of the number of hens to the total number of animals in the farm?

Ans: _____

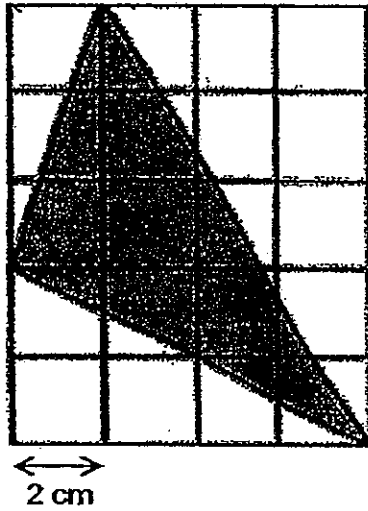
- 4 ABCD is a rhombus and ABE is a right-angled triangle. $\angle ADC = 70^\circ$.
Find $\angle BCE$.



Ans: _____°

(Go on to the next page)

- 5 Find the area of the shaded triangle.



Ans: _____ cm^2

(Go on to the next page)

For Questions 6 to 18, show your working clearly in the space below each question and write your answer in the spaces provided. The number of marks available is shown in the brackets [] at the end of each question or part-question. (50 marks)

- 6 The ratio of the number of Singapore stamps to the number of Malaysia stamps Peter had was 4 : 5. After giving away $\frac{1}{2}$ of his Singapore stamps to his friend, he had 45 more Malaysia stamps than Singapore stamps. How many Malaysia stamps did he have?

Ans: _____ [3]

- 7 Jane, Mary and Tom had a total of 400 game cards. Jane gave 45 cards to Mary. Mary gave 56 cards to Tom. In the end, the ratio of the number of cards Tom had to the number of cards Jane had to the number of cards Mary had was 9 : 6 : 10. How many cards did Mary have at first?

Ans: _____ [3]

(Go on to the next page)

- 8 Ahmad carried home 3 bags of books. The total number of books in Bags B and C is 9 more than the number of books in Bag A. The total number of books in Bags A and C is 13 more than the number of books in Bag B. Given that Bag A has more books than Bag B, how many books are there in Bag C?

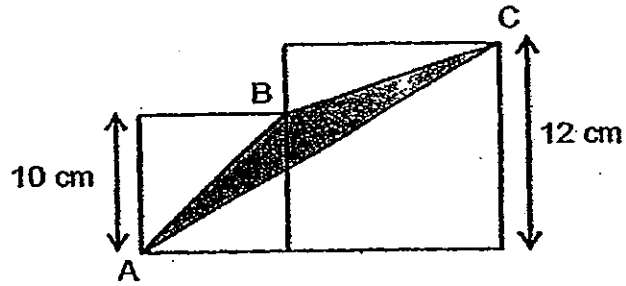
Ans: _____ [3]

- 9 Henry took 3 Mathematics tests last year. His average score for the first 2 tests was 88 and his average score for all the 3 tests was 85. Henry scored 5 more marks in the second test than the third test. What was his score for the first test?

Ans: _____ [3]

(Go on to the next page)

- 10 The figure below is made up of two squares. Find the area of the triangle ABC.

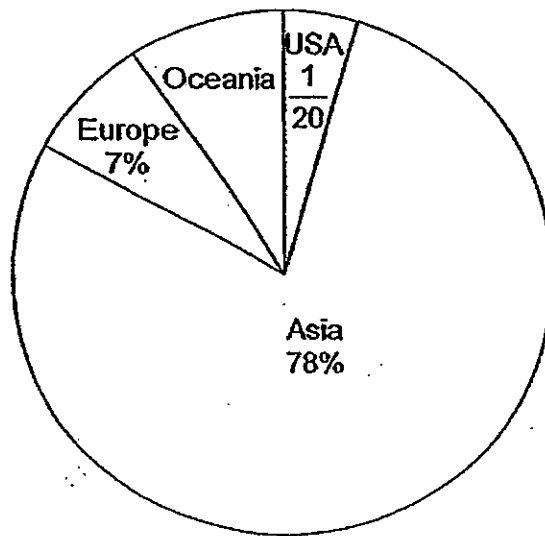


Ans: _____ [3]

(Go on to the next page)

11 The pie chart below shows the percentage of visitors to Singapore in June 2012. There were 900 666 visitors from Asia.

- (a) What percentage of the visitors was from Oceania?
- (b) How many visitors were there altogether? Round off your answer to the nearest thousand.



Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

12 At a concert, there were $\frac{4}{5}$ as many boys as girls and $\frac{2}{3}$ as many adults as children. There were 120 more adults than boys.

(a) How many people were there at the concert?

(b) What fraction of the people at the concert were children?

Ans: (a) _____ [3]

(b) _____ [1]

(Go on to the next page)

13 John is k years old. His father is 4 times as old as him. His mother is 3 years younger than his father.

(a) How old is John's mother? Give your answer in terms of k .

(b) In how many years' time will John's father be twice as old as John. Give your answer in terms of k .

Ans: (a) _____ [2]

(b) _____ [2]

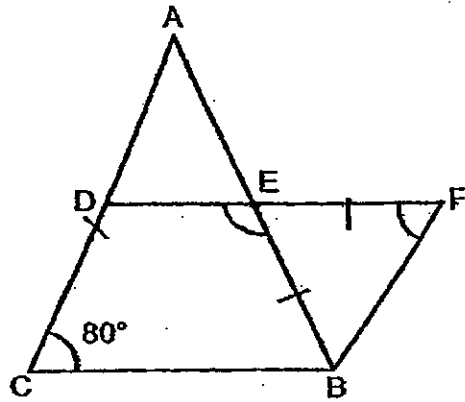
(Go on to the next page)

14 In the diagram below, ABC is an isosceles triangle and BCDF is a trapezium.

$BE = EF$ and $\angle DCB = 80^\circ$.

(a) Find $\angle BED$.

(b) Find $\angle BFE$.



Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

15 The ratio of Liling's money to Yingqi's money was 7 : 4. When Liling gave \$100 to Yingqi, the ratio became 5 : 6.

- (a) How much money did Liling have at first?
- (b) What fraction of her money did Liling give away to Yingqi?
Give your answer in the simplest form.

Ans: (a) _____ [3]

(b) _____ [1]

(Go on to the next page)

16 There are 40 pupils in Primary 4A in January. The ratio of the number of boys to the number of girls in the class is 2 : 3. $\frac{5}{8}$ of the boys wear spectacles and $\frac{2}{3}$ of the girls wear spectacles.

- (a) What percentage of the class wore spectacles in January?
- (b) 5 more pupils needed to wear spectacles in July. What percentage of the class wore spectacles in July?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

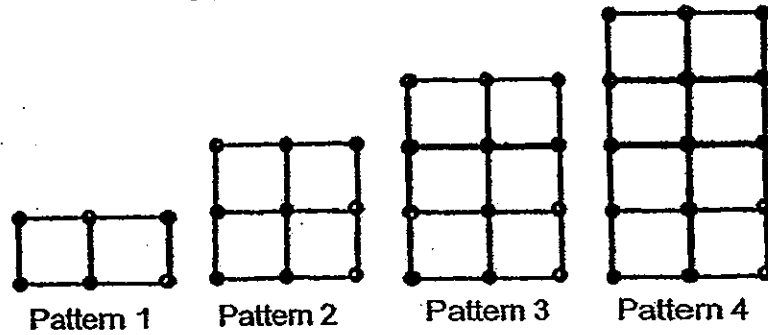
- 17 Shop A and Shop B had a total of 10 400 packets of flour at first. Both shops sold $\frac{3}{5}$ of their packets of flour. Shop B then had 520 more packets of flour than Shop A.
- (a) How many packets of flour did Shop B have at first?
- (b) Shop B sold each packet of flour at \$2.25. How much did Shop B collect from the sale of the flour?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

18. Ahmad made the following patterns using dots and lines.



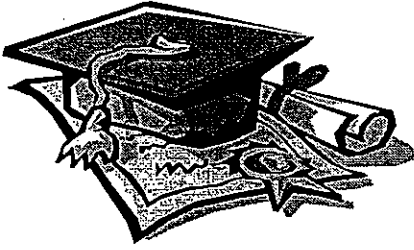
	Number of lines	Number of dots
Pattern 1	7	6
Pattern 2	12	9
Pattern 3	17	12
Pattern 4	22	15
.	.	.
.	.	.
Pattern 6	(a) _____	

- (a) Find the number of lines in Pattern 6. Write your answer in the table above. [1]
- (b) Find the total number of the lines and dots in Pattern 15.
- (c) Which Pattern has a total of 245 lines and dots?

Ans: (a) _____ [2]

(b) _____ [2]





ANSWER SHEET

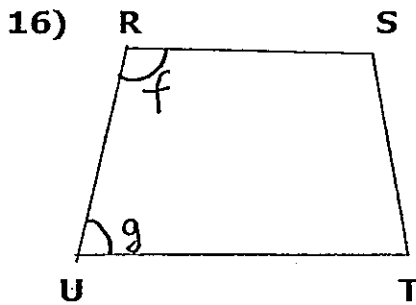
EXAM PAPER 2013

SCHOOL : MGS

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
3	4	1	4	4	2	3	2	1	1	1	1	1	1	4



- 17) 105° 18) 0.807 19) 12 girls
 20) 1.125 21) 12:5 22) \$2500
 23) \$135 24) 25cm^2 25) 25%
 26) $\$2p/3$ 27) 240° 28) 37.5%
 29) 540m 30) \$52.25

Paper 2

1) $n+5+5 = n+10$

$(n+10) \div 3 = n+10/3$

There are $n+10/3$ marbles

2) $180^\circ - (36^\circ \times 2) = 180^\circ$

$\angle JNM = 180^\circ$ (all sides of JNMLK are the same)

$\angle JNM$ is 108°

$$3) \begin{array}{l} h : c \quad c : g \\ 3 : 4 \quad 2 : 3 \end{array}$$

$$\begin{array}{l} h : c : g \\ 6 : 8 : 12 \end{array}$$

$$H : T+L$$

$$6 : 26$$

$$3 : 13$$

The ratio is 3:13

$$4) (180^\circ - 70^\circ) \div 2 = 55^\circ$$

$$70^\circ + 55^\circ = 125^\circ$$

$\angle BCE$ is 125°

$$5) \frac{1}{2} \times 4 \times 8 = 16$$

$$\frac{1}{2} \times 6 \times 10 = 30$$

$$\frac{1}{2} \times 2 \times 6 = 6$$

$$16 + 30 + 6 = 52$$

$$10 \times 8 = 80$$

$$80 - 52 = 28$$

The area of the shaded triangle is 28cm^2

$$6) S : M$$

$$4 : 5$$

$$2 : 5$$

$$5 - 2 = 3$$

$$45 \div 3 = 15 \text{ (1unit)}$$

$$15 \times 5 = 75$$

He had 75 Malaysia stamps.

$$7) T : J : M$$

$$9 : 6 : 10$$

$$400 \div (10 + 6 + 9) = 16$$

$$16 \times 10 = 160$$

$$160 + 56 = 216$$

$$216 - 45 = 171$$

Mary had 171 cards at first.

8) 11 books

9) $88 \times 2 = 176$

$85 \times 3 = 255$

$255 - 176 = 79$ (3rd test)

$79 + 5 = 84$ (2nd test)

$176 - 84 = 92$

He got 92 marks for the first test.

10) $\frac{1}{2} \times 12 \times 2 = 12$

$\frac{1}{2} \times 10 \times 10 = 50$

$\frac{1}{2} \times 12 \times 22 = 132$

$10 \times 10 + 12 \times 12 = 244$

$244 - 132 - 50 - 12 = 50$

The area of the triangle ABC is 50cm²

11)a) $\frac{1}{20} = \frac{5}{100}$

$100 - 78 - 7 - 5 = 10$

10% of the visitors was from Oceania.

b) 78% → 900666 visitors

$100\% \rightarrow 100 \times \frac{900666}{78} = 1154700$ visitors

≈ 1155000 visitors

There were 1155000 visitors altogether.

12)a) $6 - 4 = 2$

$120 \div 2 = 60$

$60 \times (4+5+6) = 900$

There were 900 people at the concert.

b) $60 \times 9 = 540$

$\frac{540}{900} = \frac{3}{5}$

$\frac{3}{5}$ of the people were children.

13)a) $K \times 4 = 4K$

$4K - 3 = (4K - 3)$

John's mother is $(4K - 3)$ years old.

b) $4K - K = 3K$

$3K \times 2 = 6K$

$6K - 4K = 2K$

John's father will be twice as old as John in 2K years time.

14)a) $180^\circ - (80^\circ \times 2) = 20^\circ$
 $80^\circ + 20^\circ = 100^\circ$
 $\angle BED = 100^\circ$ (vert. opp. \angle)
 $\angle BED$ is 100°
 b) $180^\circ - 100^\circ = 80^\circ$
 $(180^\circ - 80^\circ) \div 2 = 50^\circ$
 $\angle BFE$ is 50°

15) L : Y
 7 : 4
 5 : 6

a) $7 - 5 = 2$
 2 units \rightarrow \$100
 7 units $\rightarrow 7 \times 100/2 = \350
 Liling had \$350 at first.

b) $2/7 = 2/7$
 Liling gave $2/7$ of her money to Yingqi.

16) b : g bws : bns gws : gns
 2 : 3 5 : 3 2 : 1
 8 : 12 8 : 4

a) $5 + 8 = 13$
 $13/20 \times 100\% = 65\%$
 65% of the class wore spectacles in January.

b) $40 \div 20 = 2$
 $2 \times 13 = 26$
 $26 + 5 = 31$
 $31/40 \times 100\% = 77.5\%$
 77.5% of the class wore spectacles in July.

17)a) $260 \times 5 = 1300$
 $(10400 - 1300) \div 10 = 9100 \div 10 = 910$
 $(910 \times 5) + 1300 = 5850$
 Shop B had 5850 packet of flour at first.
 b) $3/5 \times 5850 = 3510$
 $3510 \times 2.25 = 7879.50$
 Shop B collected \$7879.50

**18)a) $7 + 5 + 5 + 5 + 5 + 5 = 32$
There are 32 lines in Pattern 6.**

**b) $15 - 1 = 14$
 $14 \times 8 = 112$
 $112 + 13 = 125$
There are 125 dots and lines in Pattern 15.**

**c) $245 - 13 = 232$
 $232 \div 8 = 29$
 $29 + 1 = 30$
Pattern 30 has 245 lines and dots.**





NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 – 2013
PRIMARY 6

MATHEMATICS

Paper 1

Section A: 15 Multiple Choice Questions (20 marks)

Section B: 15 Questions (20 marks)

Total Time for Paper 1: 50 minutes

INSTRUCTION TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided for Questions 1-15.
6. You are not allowed to use the calculator for Paper 1.

Marks Obtained

Paper 1		/ 40
Paper 2		/ 60
Total		/ 100

Name : _____ ()

Class : _____

Date : 27 February 2013

Parent's Signature : _____

1000
1000
1000
1000
1000

1000
1000
1000
1000
1000

Section A (20 marks)

Questions 1 to 10 carry 1 mark each.

Questions 11 to 15 carry 2 marks each.

For each question, four options are given. One of them is the correct answer.

Make your choice (1, 2, 3 or 4) and shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. 6 hundreds, 7 tenths and 9 thousandths is _____.

(1) 670.009

(2) 600.970

(3) 600.709

(4) 600.079

2. $\frac{2}{3} \div \frac{2}{5}$ is the same as _____.

(1) $\frac{2}{3} + \frac{5}{2}$

(2) $\frac{3}{2} + \frac{2}{5}$

(3) $\frac{3}{2} \times \frac{2}{5}$

(4) $\frac{2}{3} \times \frac{5}{2}$

3. Express $\frac{6}{25}$ as a percentage.

(1) 0.024%

(2) 0.24%

(3) 2.4%

(4) 24.0%

4. $\frac{3}{8} = \underline{\hspace{2cm}} : 48$

(1) 6

(2) 16

(3) 18

(4) 24

5. Harry and Sunny had a total of 39 stickers. The ratio of Harry's stickers to Sunny's stickers was 4 : 9. How many more stickers had Sunny than Harry?

(1) 12

(2) 13

(3) 15

(4) 27

6. Rene has the same number of \$2 notes and \$5 notes. Their total value is \$56. What is the value of all her \$2 notes?

(1) \$14

(2) \$16

(3) \$28

(4) \$40

7. Mdm Lee used $\frac{1}{3}$ kg of flour to bake 5 similar cakes. How many kilograms of flour did she use to bake 2 such cakes?

(1) $\frac{1}{30}$ kg

(2) $\frac{1}{15}$ kg

(3) $\frac{2}{15}$ kg

(4) $\frac{2}{3}$ kg

8. Candy scored 60 marks for her first test and 75 marks for her second test. Each test was out of 100 marks. Find the percentage increase in her score.

(1) 15%

(2) 20%

(3) 25%

(4) 80%

9. Sally had as many red beads as green beads. She used $\frac{1}{4}$ of her red beads and $\frac{1}{2}$ of her green beads for a necklace. What fraction of her beads had she left?

(1) $\frac{1}{4}$

(2) $\frac{3}{8}$

(3) $\frac{5}{8}$

(4) $\frac{3}{4}$

10. $\frac{1}{5}$ of Ken's salary is $\frac{1}{4}$ of John's salary. What is the ratio of John's salary to Ken's salary?

1) 1 : 20

2) 20 : 1

3) 5 : 4

4) 4 : 5

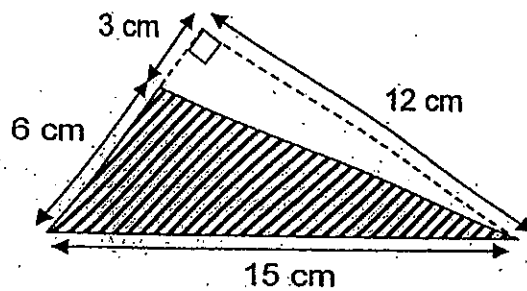
11. Study the figure below carefully (not drawn to scale). Find the area of the shaded triangle.

(1) 36 cm^2

(2) 45 cm^2

(3) 54 cm^2

(4) 90 cm^2



12. For every $\frac{1}{6}$ of the wall that Helen paints, Joan will paint $\frac{1}{3}$ of it. What fraction of the wall will Joan paint if Helen paints $\frac{1}{8}$ of it?

(1) $\frac{1}{18}$

(2) $\frac{1}{16}$

(3) $\frac{1}{4}$

(4) $\frac{1}{2}$

13. Amanda and Darren shared the total cost of a present. Amanda paid \$25 more than $\frac{2}{5}$ of the cost of the present. Darren paid \$65. How much was the present?

- (1) \$150
- (2) \$180
- (3) \$225
- (4) \$270

14. There were 40 children at a birthday party. 30 of them were girls. How many percent more girls than boys were there?

- (1) 25 %
- (2) 50 %
- (3) 200 %
- (4) 300 %

15. Jenny has some blue and red marbles in Jar A and Jar B. Each jar has the same number of marbles. The number of blue marbles to the number of red marbles in Jar A is 1 : 2 while that in Jar B is 4 : 5. What is the ratio of the total number of blue marbles to the total number of red marbles that Jenny has?

- (1) 1:3
- (2) 2:5
- (3) 5:7
- (4) 7:11

Section B (20 marks)

Questions 16 to 25 carry 1 mark each. Questions 26 to 30 carry 2 marks each.

For each question from 26 to 30, **show your workings clearly in the space below it and write your answer in the space provided.** Give your answers in the units stated.

16. Express $10\frac{1}{2}\%$ as a decimal.

Ans: _____

17. Express 9 months as a fraction of 3 years in the simplest form.

Ans : _____

18. Mrs. Wong can exchange 300 coupons for 200 stickers at a shop.
How many stickers can she exchange 900 coupons for?

Ans : _____ stickers

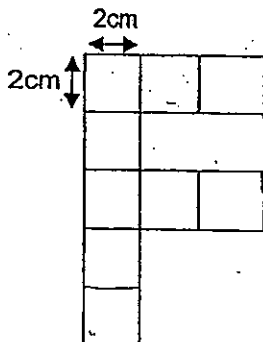
19. Lily and May shared a sum of money in the ratio 18 : 7.
What percentage of the sum of money did May receive?

Ans: _____ %

20. The ratio of Ali's money to Ben's money to Clara's money is 1 : 2 : 3.
What is the ratio of Clara's money to the total amount of money that the three children have? (Write your answer in the simplest form)

Ans : _____ : _____

21. The figure below is made up of 9 identical squares of sides 2 cm each. By rearranging the squares in the figure, form a rectangle which has the largest possible perimeter. Find the perimeter of this newly formed rectangle.

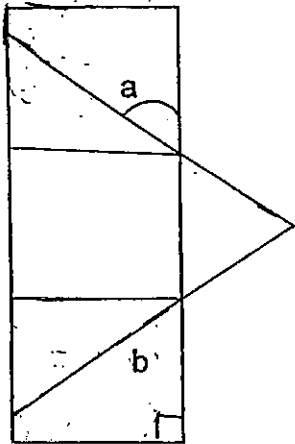


Ans: _____ cm

22. Mrs Phua saved a total of \$70 in the first 5 months. She saved \$50 in the sixth month. On the average, how much did she save in a month?

Ans : \$ _____

23. The figure below (not drawn to scale) is made up of an equilateral triangle and a rectangle. Find the sum of $\angle a$ and $\angle b$.



Ans : _____°

24. At a pet shop, the price of a swordtail is $\frac{5}{8}$ the price of a catfish. The price of a guppy is half the price of a swordtail. What is the ratio of the price of a catfish to the price of a swordtail to the price of a guppy?

Ans : ____ : ____ : ____

25. A faulty clock gains $\frac{1}{4}$ min each day. How long does the clock take to gain $\frac{1}{4}$ h?

Ans: _____ day(s)

26. Parcel A is $\frac{1}{6}$ as heavy as Parcel B. Parcel B is $\frac{1}{2}$ as heavy as Parcel C. How many times is Parcel C as heavy as Parcel A?

Ans: _____ times

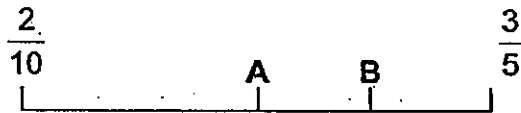
27. Sara went shopping with \$300. She spent 35% of her money on a skirt and 30% of the remainder on a bag. How much did she spend on the bag?

Ans : \$ _____

28. Mrs Wong bought a total of 42 curry puffs and tuna puffs. After giving away 27 curry puffs, there were $\frac{2}{3}$ as many curry puffs as tuna puffs left. How many curry puffs did Mrs Wong buy?

Ans: _____ curry puffs

29. Look at the number line below.



A is exactly midway of $\frac{2}{10}$ and $\frac{3}{5}$. B is exactly midway of A and $\frac{3}{5}$.

What is the value of B?

Write your answer in the simplest form.

Ans: _____

30. A square was enlarged so that its length on each side was tripled. What was the percentage increase in its perimeter?

Ans: _____ %

End-of-Paper 1

Remember to check your work



**NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 – 2013
PRIMARY 6**

MATHEMATICS

Paper 2

Total Time for Paper 2: 1 hour 40 minutes

INSTRUCTION TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully
4. Answer all questions and show your workings clearly.
5. You are allowed to use a calculator.

Marks Obtained

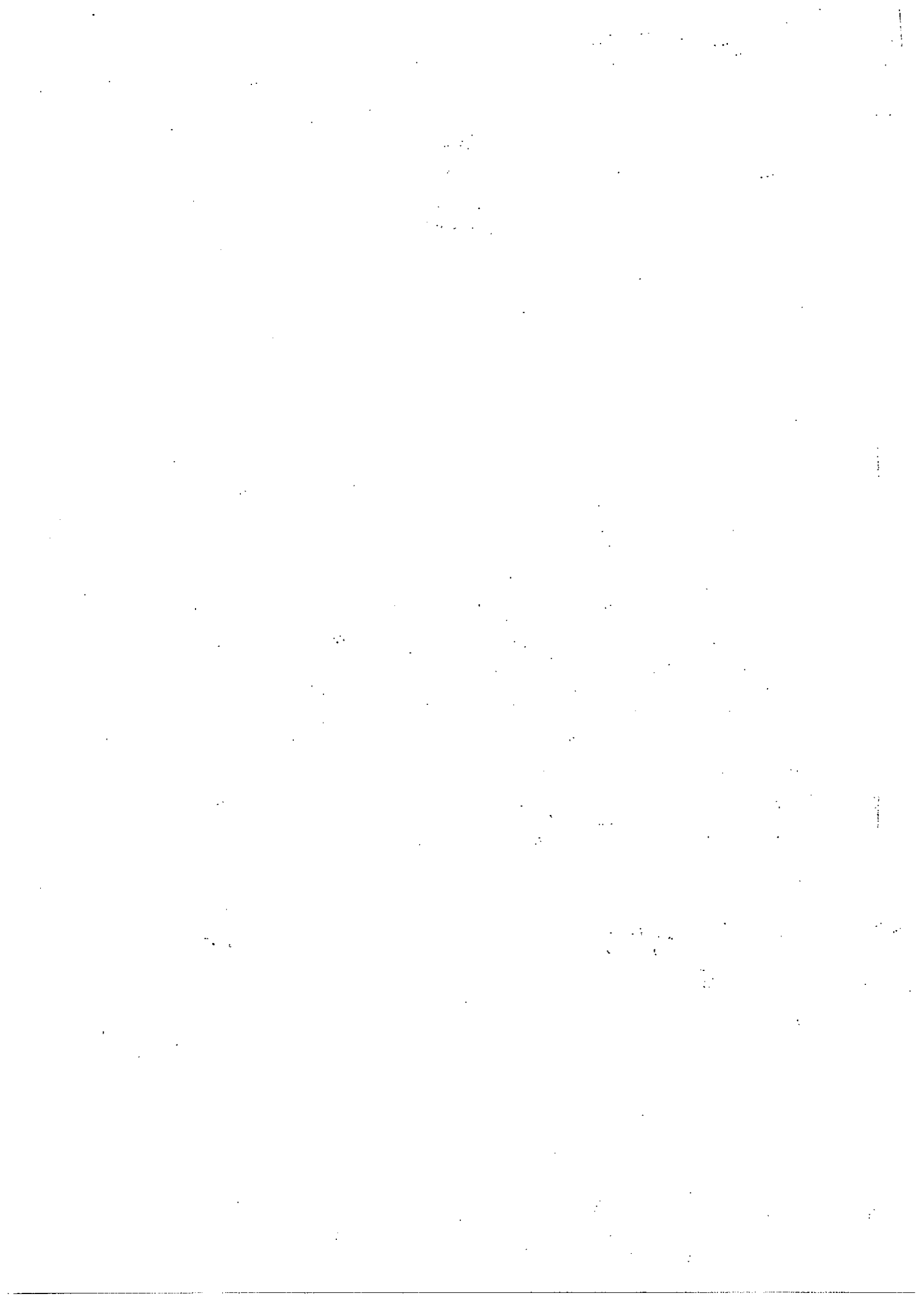
Total		/ 60
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Name : _____ ()

Class : _____

Date : 27 February 2013

Parent's Signature : _____



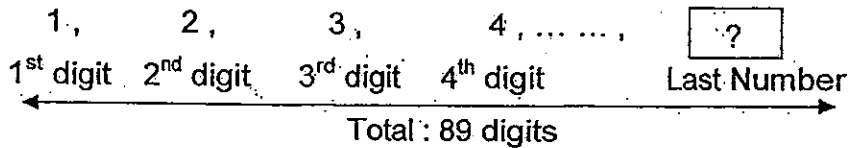
Paper 2 (60 marks)

Questions 1 to 5 carry 2 marks each. Show your workings clearly in the space below it and write your answer in the space provided. Give your answers in the units stated.

1. At a fruit stall, durians were sold at \$11.00 each. Marcus had \$183.20.
What is the most number of durians that he could buy with all his money?

Ans: _____ durians

2. Shawn wrote some consecutive numbers starting from 1 on a piece of paper. He stopped after writing 89 digits. What was the last **2-digit number** that he wrote?



Ans: _____

3. At a party, there are 288 more girls than boys. The number of girls is 66% of the total number of children at the party. How many children are there at the party?

Ans: _____ children

4. Judy spent 3 days making some kites for sale. Each day she made 4 kites more than the day before. She made a total of 42 kites. How many kites did she make on the first day?

Ans: _____ kites

5. Ann and Sherry have some twenty-cent coins in the ratio 2 : 9 respectively. If Sherry has \$14 more than Ann, how much does Sherry have?

Ans: \$ _____

For each question from 6 to 18, show your workings clearly in the space below it and write your answer in the space provided. The number of marks available is shown in brackets [] at the end of each question or part-question. Remember to include the units wherever possible.

6. Alice has a 12m ribbon. She cut it into shorter pieces of $\frac{2}{5}$ m each.

How much did Alice receive if she sold all the $\frac{2}{5}$ m ribbons at \$0.55 each?

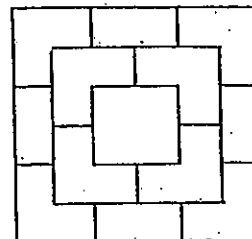
Ans: _____ [3]

7. Danny has read 368 pages of a book. He plans to finish reading the rest of the book in the next 9 days by reading the same number of pages each day. If he completes 36% of the book in the next 6 days, how many pages are there in the book?

Ans: _____ [3]

8. The figure below is the top view of a solid figure. The solid figure is made up of 3 layers of identical cubes with a single cube at the top layer.

- (a) How many cubes are there in the solid figure?
(b) If the solid figure has a volume of 896 cm^3 , find the length of each cube.



Ans: (a) _____ [1]

(b) _____ [2]

9. Allison kept 1075 beads into four jars, labelled A, B, C and D. Jar A had the least number of beads and Jar D had the most. The difference in the number of beads between Jar A and the number of beads in the other jars were 35, 55 and 85. How many beads are there in Jar A?

Ans: _____ [3]

10. 26 scouts spread themselves out evenly along a hiking route. A scout can be found after every $\frac{3}{5}$ km of the route. Find the distance between the first and the last scout.

Ans: _____ [3]

11. Mr Lee had 12 tins of biscuits. At first, each of the tins contained the same number of biscuits. He took 33 biscuits from each tin. After that, the total number of biscuits left in the 12 tins was equal to the total number of biscuits in 3 of the tins at first. What was the number of biscuits in each tin at first?

Ans: _____ [3]

12. A shop sells a file for \$2.80. It gives a 25% discount for every 4 files bought during a sale. Hatta paid \$154 for some files during the sale, what was the most number of files he bought?

Ans: _____ [4]

13. I have some red and blue counters in a box.

I add in 20 red counters, the ratio of my red counters to my blue counters becomes 2 : 3.

Then I add in another 60 blue counters, the ratio of my red counters to my blue counters becomes 1 : 3.

How many counters do I have in the box at first?

Ans: _____ [4]

14. I do not have enough savings now to buy a bag. If I increase my savings by 30%, I would need another \$1. If I increase my savings by 40%, I would have \$34 more than I need. What is the cost of the bag?

Ans: _____ [4]

15. The ratio of Glen's beads to Helen's beads to Liz's beads is 6 : 9 : 11. If Glen's beads is reduced by 10% and Helen's beads is increased by 10%, the new total number of beads that the three of them have is 4734. Find the number of beads that Liz has.

Ans: _____ [5]

16. Peter had some stamps. He lost $\frac{2}{3}$ of them and gave $\frac{1}{4}$ of the remainder to Ali.

After that, his brother gave him 120 stamps.

The ratio of the number of stamps he had at first to the number of stamps he had at the end was 4 : 3.

How many stamps did Peter have at the end?

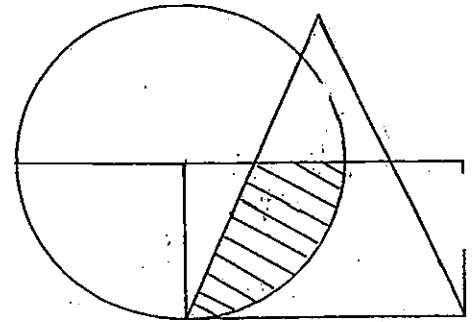
Ans: _____ [5]

17. The figure below consists of a circle, a rectangle and an isosceles triangle overlapping one another. The ratio of the area of the circle to the area of the triangle to the area of the rectangle is $7 : 5 : 3$. $\frac{1}{4}$ of the triangle is shaded.

The overlapped area of the circle and the triangle is $\frac{1}{4}$ the area of the circle.

The overlapped area of the circle and the rectangle is $\frac{1}{4}$ the area of the circle.

What percentage of the figure is unshaded? Give your answer in 2 decimal places.



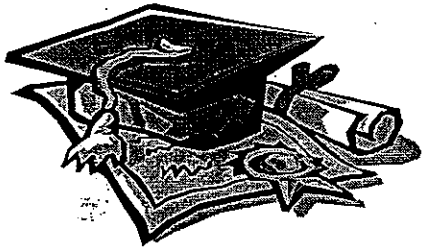
Ans: _____ [5]

18. There were some ten-cent coins and fifty-cent coins in a piggy bank. The number of ten-cent coins in the piggy bank was $\frac{1}{2}$ the number of fifty-cent coins. Ahmad took out 5 fifty-cent coins and exchanged them for ten-cent coins. Then he put the money back into the piggy bank. The number of fifty-cent coins became $\frac{5}{8}$ the number of ten-cent coins. How much money was there in the piggy bank?

Ans: _____ [5]

End of Paper 2

Remember to check your work.



ANSWER SHEET

EXAM PAPER 2013

SCHOOL : NAN HUA

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
3	4	4	3	3	2	3	3	3	4	1	3	1	3	4

- 16) 0.105 17) $\frac{1}{4}$ 18) 600 stickers 19) 28% 20) 1:2
21) 40cm 22) \$20 23) 120° 24) 16 : 10 : 5 25) 60 day(s)
26) 12 times 27) \$58.50 28) 33 curry puffs 29) $\frac{1}{2}$ 30) 200%

Paper 2

1) $\$183.20 \div \$11 = 16$ durians

2) $89 - 9 = 80$

$80 \div 2 = 40$

$40 + 9 = 49$

3) $100 - 66 = 34$

$66 - 34 = 32$

$32u \rightarrow 288$

$1u \rightarrow 9$

$100u \rightarrow 900$ children

4) $42 \div 3 = 14$ (average)

10 14 18



average

Ans: 10 kites

5) $\$1.80 - \$0.40 = \$1.40$

$\$14 \div \$1.40 = 10$

$\$1.80 \times 10 = \18

6) $12/1 \div 2/5 = 12/1 \times 5/2 = 30$

$30 \times \$0.55 = \16.50

7) $3/50 \times 9/1 = 27/50$

$368 \div 23 = 16$

$16 \times 50 = 800$

8)a) $9 + 4 + 1 = 14$

b) $64 = 4 \times 4 \times 4$

$= 4\text{cm}$

9) $35 + 55 + 85 = 175$

$1075 - 175 = 900$

$900 \div 4 = 225$

10) $3/5\text{km} = 600\text{m}$

$26 - 1 = 25$

$25 \times 600 = 15000$

$15000\text{m} = 15\text{km}$

11) $12u - 396 = 3u$

$12u = 3u + 396$

$9u = 396$

$1u \rightarrow 44$

12) $4 \times 2.80 = 11.20$

$11.20 \div 100 \times 75 = 8.40$

$154 \div 8.40 = 18 \text{ R}2.80$

$18 \times 4 = 72$

$72 + 1 = 73$

13)80

$$\begin{aligned} 14) \$1 + \$34 &= \$35 \\ \$35 \times 13 &= \$455 \\ \$455 + \$1 &= \$456 \end{aligned}$$

$$\begin{array}{r} 15) \text{ G : H : L} \\ \text{6 : 9 : 11} \times 10 \\ \text{60u : 90u : 110u} \\ \hline \text{- 6 : + 9} \end{array}$$

$$\begin{array}{r} 54u \quad 99u \quad 110u \end{array}$$

$$110 + 99 + 54 = 263$$

$$4734 \div 263 = 18$$

$$1u \rightarrow 18$$

$$110U \rightarrow 1980$$

$$16) 8/12 + 1/12 = 9/12$$

$$1 - 9/12 = 3/12$$

$$6U \rightarrow 120$$

$$1U \rightarrow 20$$

$$9U \rightarrow 180$$

$$17) 7+7+5+2+2+13+2 = 38$$

$$7+7+5+2+2+5+13+2 = 43$$

$$38/43 \times 100\% \approx 88.37\%$$

$$18) 16u - 40 = 5u + 125$$

$$11u - 40 = 125$$

$$11u = 165$$

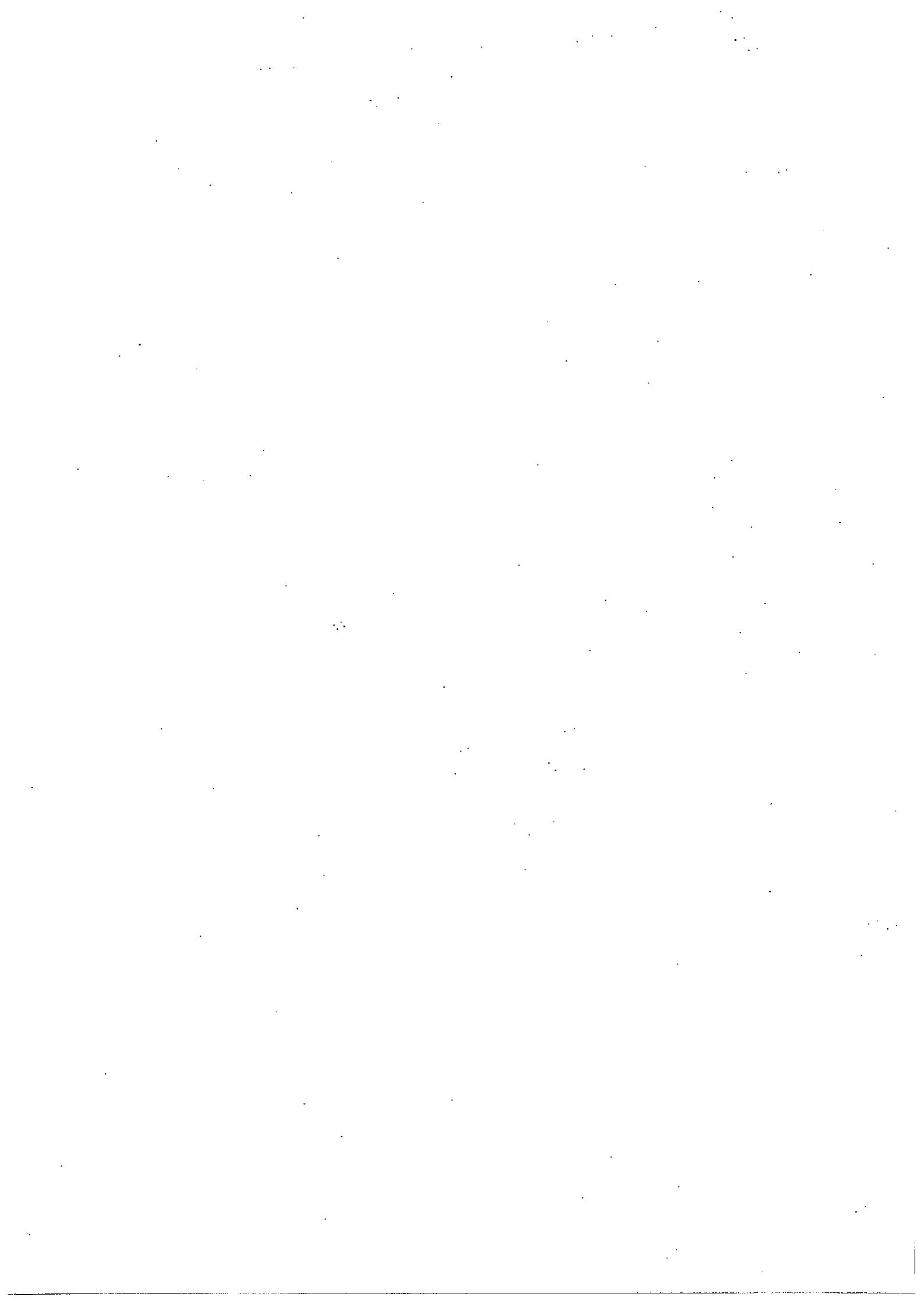
$$1u \rightarrow 15$$

$$2u \rightarrow 30$$

$$30 \times 50c = 1500c$$

$$= \$15$$

$$\$15 + \$1.50 = \$16.50$$





NANYANG PRIMARY SCHOOL
FIRST CONTINUAL EXAMINATION
2013

PRIMARY 6
MATHEMATICS
PAPER 1

DURATION: 50 MINUTES

Booklet A	/ 20
Booklet B	/ 20

Paper 1 Total: / 40

Name: _____ ()

Class: Primary 6 ()

Date: _____

Parent's Signature:

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

YOU ARE NOT ALLOWED TO USE A CALCULATOR.

PAPER 1 (BOOKLET A)

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1 Simplify $6a + 18 - 4a - 12$.

(1) $2a - 6$

(2) $2a + 6$

(3) $2a + 30$

(4) $10a - 6$

2 Find the value of $3412 \div 100$.

(1) 0.3412

(2) 3.412

(3) 34.12

(4) 341.2

3 Find the value of $72 - 8 \div 2 + (3 \times 8 + 4)$.

(1) 38

(2) 62

(3) 70

(4) 74

4 Which one of the following fractions is not the equivalent fraction of $\frac{3}{7}$?

(1) $\frac{6}{14}$

(2) $\frac{15}{35}$

(3) $\frac{24}{49}$

(4) $\frac{27}{63}$

5 Find the value of $\frac{2}{5} + \frac{6}{10}$.

(1) 1

(2) $\frac{8}{5}$

(3) $\frac{8}{10}$

(4) $\frac{8}{15}$

6 The length of a string is $1\frac{1}{4}$ m. Find the total length of 8 such strings.

(1) $\frac{5}{32}$ m

(2) $6\frac{1}{2}$ m

(3) 2 m

(4) 10 m

7 Express 0.075 as a percentage.

(1) 0.75%

(2) 7.5%

(3) 75%

(4) 750%

8 Find the sum of 0.25 and 0.4.

(1) 0.15

(2) 0.29

(3) 0.65

(4) 4.25

9 A jug can hold $\frac{7}{8}$ l of orange juice when it is completely full. What is the amount of orange juice in the jug when it is $\frac{2}{3}$ full?

(1) $\frac{7}{12}$ l

(2) $\frac{7}{24}$ l

(3) $2\frac{5}{8}$ l

(4) $5\frac{1}{4}$ l

10 The table shows the scores that four students obtained for their English test. Find the student whose score was the closest to the average score of the 4 students.

Name	Score
Joe	50
Kumar	85
Caili	45
Halim	100
Total	280

(1) Joe

(2) Kumar

(3) Caili

(4) Halim

- 11 What is the missing number in the box?

$$1.23 \times 100 = \square \times 1\,000$$

- (1) 0.0123
(2) 0.123
(3) 1.23
(4) 12.3
- 12 The number of beads in Bag B is 4 times that of Bag C. The number of beads in Bag A is $2\frac{1}{2}$ times that of Bag B. If there are 5 beads in Bag C, how many beads are there in Bag A?

- (1) 10
(2) 25
(3) 40
(4) 50

13 There were 50 apples in a box. Mrs Lee put in 12 more apples. What was the percentage increase in the number of apples?

(1) 6%

(2) 24%

(3) 80%

(4) 125%

14 72 pupils are divided into groups to work on a Social Studies project. Each group is made up of 2 or 6 pupils. If the numbers of groups of 2 and 6 pupils are the same, how many groups are there altogether?

(1) 9

(2) 12

(3) 18

(4) 36

15 The average of 11 numbers is 9. If the sum of the first 10 numbers is 85, find the 11th number.

(1) 5

(2) 14

(3) 76

(4) 731

Name: _____ () Class: Pr 6 ()

P6 CA1 2013

PAPER 1 (BOOKLET B)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

16 Find the value of $24 - \frac{5x}{3}$ when $x = 6$.

Ans: _____

17 Find the value of $7492 - 3489 + 219$.

Ans: _____

18 Find the value of $49 \times 3 + 55 + 5$.

Ans: _____

19 Round off 29 992 to the nearest hundred.

Ans: _____

20 Express $2\frac{7}{8}$ as a decimal and leave your answer to 2 decimal places.

Ans: _____

21 Find the value of $12.24 \div 6$.

Ans: _____

22 What is $\frac{1}{4}$ of $\frac{3}{5}$ km? Express your answer in metres.

Ans: _____ m

23 Find the value of $\frac{4}{5} \div \frac{1}{10}$.

Ans: _____

24 What is 80% of 20?

Ans: _____

25 70% of a number is 210. What is the number?

Ans: _____

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

- 26 Joe had \$15. Ali had q times as much money as Joe. Ravi had $\$3q$ more than Ali. How much did the 3 boys have altogether? Express your answer in terms of q .

Ans: \$ _____

- 27 Aishah spent 15% of her money on a belt and 40% of it on a handbag. She spent the rest of her money on a dress. How many percent more did she spend on the dress than on the belt?

Ans: _____ %

- 28 Lily and Shane each has a sum of money. If Shane spends $\frac{3}{5}$ of his money and Lily spends $\frac{3}{7}$ of her money, the two children will have the same amount of money left. What fraction of the total sum of money is Shane's money?

Ans: _____

- 29 The table shows the number of books borrowed by the pupils from a class. Find the average number of books that were borrowed by the pupils.

Number of books	Number of pupils
0	15
1	30
2	15

Ans: _____

- 30 David, Kumar and Irfan go to the gym on 2nd June and rest on the next day. After the rest day, David goes to the gym every 2 days, Kumar goes there every 3 days and Irfan goes there every 4 days. When will they next meet in the gym again?

Ans: _____



NANYANG PRIMARY SCHOOL
FIRST CONTINUAL EXAMINATION
2013

PRIMARY 6
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	/ 60
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 6 ()

Date: _____

Parent's Signature: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

YOU ARE ALLOWED TO USE A CALCULATOR.

PAPER 2

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

-
- 1 Gina bought $2\frac{3}{4}$ l of milk. She drank $\frac{1}{5}$ l of milk. How many litres of milk were left?

Ans: _____ l

-
- 2 Mr See used a total of 50 m of wire to make 12 lanterns. What was the average length of wire that Mr See used for each lantern? Give your answer correct to 1 decimal place.

Ans: _____ m

- 3 The usual price of a wallet was \$200. During the Great Singapore Sale, a discount of 30% was given. How much was the discount?

Ans: \$ _____

- 4 Mrs Kaur bought some standing fans for her tuition centre at an average price of \$58. If she bought another standing fan which cost \$94, the average price would become \$64. Find the number of standing fans Mrs Kaur bought.

Ans: _____

- 5 There was an equal number of blouses and skirts sold. The blouses were priced at \$12 each and the skirts were priced at \$20 each. The total amount collected from the sale was \$2048. How many blouses were sold?

Ans: _____

For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided.

The number of marks available is shown in brackets [] at the end of each question or part-question.

(50 marks)

- 6 (a) Susie spent 5 minutes less than p hours to answer 50 questions in a test. How many minutes did she spend to answer each question? Express your answer in terms of p .

- (b) If $p = 4$, how many minutes did she spend to answer each question?

Ans: (a) _____ [2]

(b) _____ [1]

- 7 Box A contains ten-dollar notes while Box B contains five-dollar notes. There are 450 more notes in Box B than in Box A. If the total amount of money in Box A and Box B is \$7500, how many ten-dollar notes are there?

Ans: _____ [3]

- 8 The number of boys in a basketball court was $\frac{5}{4}$ of the number of girls in a hall. When 84 boys left the basketball court, the number of boys in the basketball court became $\frac{2}{3}$ of the number of girls in the hall. How many boys were there at the basketball court at first?

Ans: _____ [3]

- 9 A machine can cut a metal rod into 3 equal pieces with two cuts in 3.96 minutes. At this rate, how long will the machine take to cut the metal rod into 8 equal pieces? Give your answer to the nearest minute.

Ans: _____ [3]

- 10 Bala spent 50% more pocket money than Carol and Ali spent 20% less pocket money than Bala. If Ali spent \$36, how much pocket money did the children spend altogether?

Ans: _____ [3]

- 11 There were some boys and girls in a bus. When 15 girls alighted from the bus, the percentage of the boys in the bus increased from 25% to 40%. How many children were in the bus in the beginning?

Ans: _____ [4]

- 12 Billy and Arifin have to paint a three-room flat. Billy can paint twice as fast as Arifin. They will take a total of 8 hours to paint the entire flat. How long will Billy take to paint the whole flat if he paints the house by himself?

Ans: _____ [4]

- 13 Isabelle and Agnes decided to buy and share the cost of their father's birthday present. Isabelle contributed \$18 which was 25% of her savings. Agnes contributed 60% of her savings. The amount of Agnes' savings left was 0.5 as much as what Isabelle had left. How much did Agnes contribute to buy the present?

Ans: _____ [4]

- 14 If Siva wants to buy 3 pens and 5 diaries, he will be short of \$6. If he buys 5 pens and 3 diaries, he will have \$4 left. Given that a pen costs \$1.20, what is the maximum number of diaries Siva can buy with \$20?

Ans: _____ [4]

- 15 Bookworm Library has 5510 members. $\frac{2}{5}$ of the adults are men. $\frac{2}{3}$ of the children are boys. There are 2420 male members. How many adults are there?

Ans: _____ [4]

- 16 There were some marbles in a container. Leroy took out half of them plus 3 more. Then Olivia took out $\frac{1}{3}$ of the remaining marbles plus 2 more. Finally, Ryan took out $\frac{1}{4}$ of the remaining marbles plus 5 more. In the end, there were only 25 marbles in the container. How many marbles were in the container at first?

Ans: _____ [5]

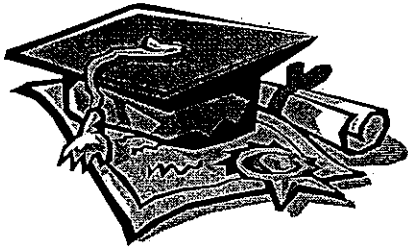
- 17 Alma and Mila went shopping with some money. Alma had \$72 more than Mila at first. Alma spent $\frac{1}{6}$ of her money on a brooch while Mila spent $\frac{1}{4}$ of her money on a dress. After that, Alma had \$84 more than Mila. How much money did Alma have at first?

Ans: _____ [5]

- 18 At first, Joan had \$400 more than Thana. Joan gave 60% of her money to Thana. After that, Thana gave 25% of her money to Joan. In the end, Thana had \$160 more than Joan. How much money did Thana have at first?

Ans: _____ [5]

END OF PAPER



ANSWER SHEET

EXAM PAPER 2013

SCHOOL : NANYANG

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	3	4	3	1	4	2	3	1	2	2	4	2	3	2

- 16)14 17)4222 18)158 19)30000 20)2.88
21)2.04 22)150m 23)8 24)16 25)300
26)(15+33q) 27)200% 28)(10/17) 29)1 30)15th June

Paper 2

1) $2\frac{3}{4} - \frac{1}{5} = 2\frac{11}{20}$

2) $50 \div 12 \approx 4.2m$

3) $30/100 \times \$200 = \60

4) $\$64 - \$58 = \$6$
 $\$94 - \$64 = \$30$
 $\$30 \div \$6 = 5$

5) $\$12 + \$20 = \$32$
 $\$2048 \div \$32 = 64$

$$6)a) (60p - 5) \div 50 = \frac{60p - 5}{50}$$

$$b) 60 \times 4 = 240$$
$$240 - 5 = 235$$
$$235 \div 50 = 4.7 \text{ minutes}$$

$$7) 450 \times \$5 = \$2250$$
$$\$7500 - \$2250 = \$5250$$
$$\$10 + \$5 = \$15$$
$$\$5250 \div \$15 = 350$$

$$8) \frac{2}{3} = \frac{8}{12}$$
$$\frac{5}{4} = \frac{15}{12}$$
$$15 - 8 = 7$$
$$84 \div 7 = 12$$
$$12 \times 15 = 180$$

$$9) 3.96 \div 2 = 1.98$$
$$1.98 \times 7 \approx 14 \text{ minutes}$$

10) p \rightarrow parts U \rightarrow units

$$4p \rightarrow \$36$$
$$1p \rightarrow \$9$$
$$5p \rightarrow \$45$$
$$3u \rightarrow \$45$$
$$1u \rightarrow \$15$$
$$2u \rightarrow \$30$$
$$36 + \$45 + \$30 = \$111$$

<u>11) Before</u>	<u>After</u>
B - 25%	B - 40%
G - 75%	G - 60%

B : G	B : G
25 : 75	40 : 60

$$= 1 : 3$$
$$= 2 : 3$$
$$= 2 : 6$$

$$6 - 3 = 3$$
$$3 \text{ units} \rightarrow 15$$
$$1 \text{ unit} \rightarrow 5$$
$$8 \text{ units} \rightarrow 40$$

12) $8 \times 3 = 24$
 $24 \div 2 = 12$ hours

13) $25\% \rightarrow \$18$
 $100\% \rightarrow \$72$
 $\$72 - \$18 = \$54$
 $\$54 \div 2 = \27
 $\$27 \rightarrow 40\%$
 $\$13.50 \rightarrow 20\%$
 $\$40.50 \rightarrow 60\%$

Ans: \$40.50

14) $\$1.20 \times 2 = \2.40
 $\$4 + \$2.40 = \$6.40$
 $\$6.40 + \$6 = \$12.40$
 $\$12.40 \div 2 = \6.20
 $\$20 \div \$6.20 = 3.1$

Ans: 3

15) M : W B : G
 2 : 3 2 : 1

$2u + 2p \rightarrow 2420$
 $3u + 1p \rightarrow 3090$
 $1u - 1p \rightarrow 670$
 $4u \rightarrow 3760$
 $1u \rightarrow 940$
 $5u \rightarrow 4700$

16) $25 + 5 = 30$
 $30 \div 3 = 10$
 $10 \times 4 = 40$
 $40 + 2 = 42$
 $42 \div 2 = 21$
 $21 \times 3 = 63$
 $63 + 3 = 66$
 $66 \times 2 = 132$

17) \$360

18) \$500





Rosyth School
First Continual Assessment 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 1 March 2013 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet A)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Shade your answers in the Optical Answer Sheet (OAS) provided.
4. You are not allowed to use a calculator
5. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet A)	20	

*** This booklet consists of 7 pages (including this cover page)**

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Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

-
1. Last year, the number of tourists who visited the zoo was 278 600 when rounded off to the nearest hundred. Which of the following is most likely the actual number of tourists?
- (1) 278 549
 - (2) 278 649
 - (3) 278 659
 - (4) 278 709
2. A bag costs \$120 before GST. What is the cost of the bag inclusive of 7% GST?
- (1) \$111.60
 - (2) \$128.40
 - (3) \$140.40
 - (4) \$204.00
3. Simply $5e + 2 - 2e + 9 - e$.
- (1) $3e - 11$
 - (2) $8e + 7$
 - (3) $7 - 8e$
 - (4) $11 + 2e$
4. Find the value of $\frac{3m+6}{2}$ when $m = 2$.
- (1) $5\frac{1}{2}$
 - (2) 6
 - (3) 9
 - (4) 12

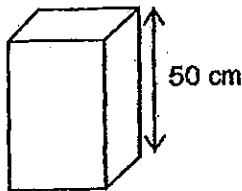
5. A yellow ribbon is k cm long. A blue ribbon is twice as long as the yellow ribbon. What is the total length of the yellow and blue ribbons?

- (1) k cm
- (2) $2k$ cm
- (3) $3k$ cm
- (4) $4k$ cm

6. The number of oranges is $\frac{3}{5}$ of the number of apples. What is the ratio of the number of apples to the total number of oranges and apples?

- (1) 2 : 3
- (2) 3 : 2
- (3) 2 : 5
- (4) 5 : 8

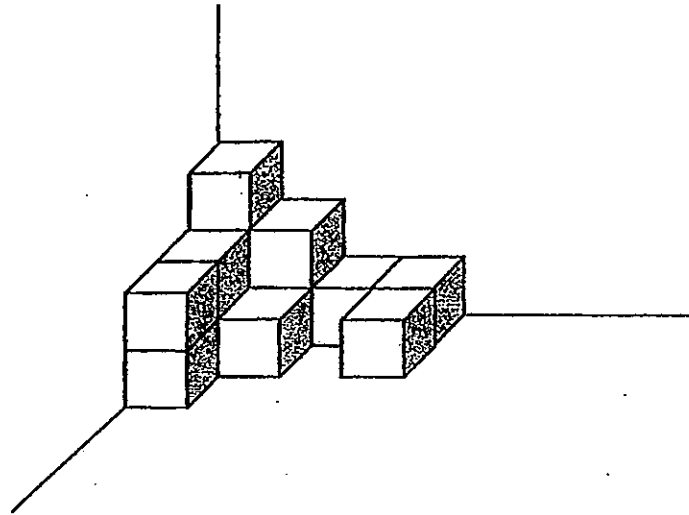
7. The box shown below is fully packed with 1-cm cubes. There are 400 cubes in it altogether.



What is the smallest possible base area of the box?

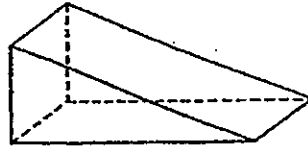
- (1) 8
- (2) 2
- (3) 9
- (4) 4

8. Siva stacked some 1-cm cubes as shown in the diagram below.
How many more cubes would he need to make a 4 cm by 4 cm by 4 cm solid?



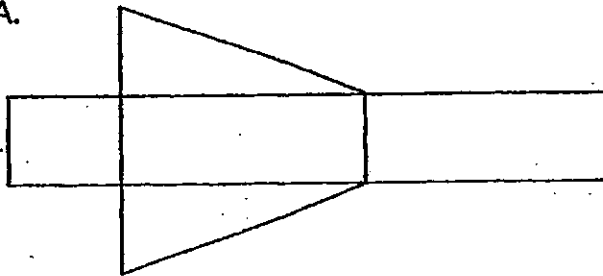
- (1) 13
(2) 23
(3) 35
(4) 51
9. Tim and Ann had a total of 420 marbles. Tim had $\frac{2}{5}$ of what Ann had. How many more marbles did Ann have than Tim?
- (1) 60
(2) 120
(3) 180
(4) 300

10. Study the prism shown below.

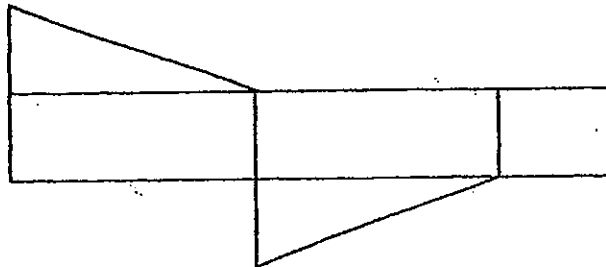


Which of the following are nets of the prism?

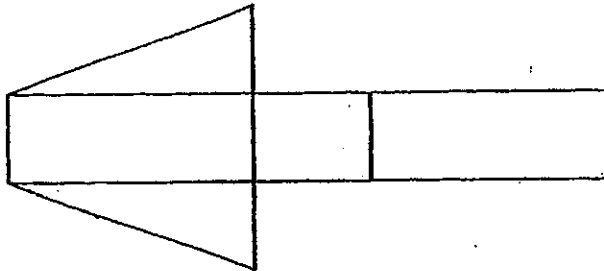
A.



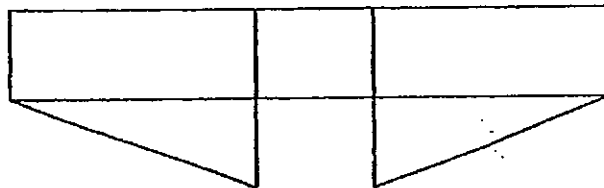
B.



C.



D.



- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) B and D only

11. Carrie is thrice as old as her daughter's age now. Her daughter will be 21 years old in 8 years' time. What is their total age now?
- (1) 13
 - (2) 39
 - (3) 52
 - (4) 76
12. Margaret has some green, blue and red beads. $\frac{3}{4}$ of the beads are green while $\frac{3}{5}$ of the remaining beads are blue. What fraction of the beads is red?
- (1) $\frac{1}{10}$
 - (2) $\frac{3}{20}$
 - (3) $\frac{3}{10}$
 - (4) $\frac{2}{5}$
13. The ratio of the mass of Ken to the mass of Jane is 5 : 3. The ratio of the mass of Jane to the mass of Rani is 4 : 5. If Rani weighs 60 kg, what is the mass of Ken?
- (1) 12 kg
 - (2) 36 kg
 - (3) 48 kg
 - (4) 80 kg

14. Alice, Ben and Connie shared \$640. Ben received 40% more than Alice. Connie received 20% less than Alice. How much more did Ben receive than Connie?

- (1) \$40
- (2) \$120
- (3) \$128
- (4) \$440

15. Ramu, Kaijie and Liling shared some money. The total amount of money Ramu and Kaijie received was \$28. The total amount of money Ramu and Liling received was \$60. Liling's amount of money was thrice as much as Ramu's amount of money. What was the total amount of money the three children share?

- (1) \$13
- (2) \$32
- (3) \$64
- (4) \$73

(Go on to Booklet B)



Rosyth School
First Continual Assessment 2013
Primary 6 mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 1 March 2013

Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet B)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. You are **not** allowed to use a calculator
4. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

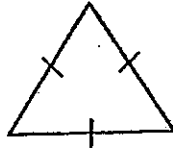
*** This booklet consists of 8 pages (including this cover page)**

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Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated.

(10 marks)

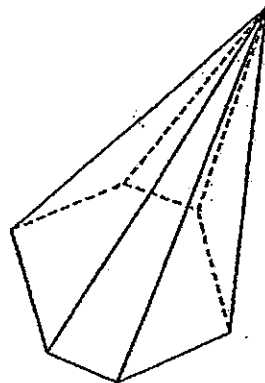
16. Below shows an equilateral triangle.



What fraction of its perimeter is the length of its one side?

Ans: _____

17. How many triangular faces are there in the solid figure shown below?



Ans: _____

18. What is the missing value in the box?

$$176 - 65 \div 5 - 3 \times 9 = \boxed{?}$$

Ans: _____

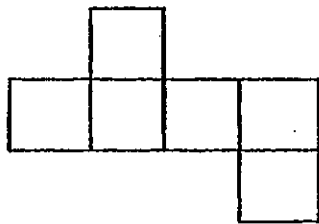
19. Evaluate the following expression given that $x = 3$.

Ans: _____

20. A wholesaler receives a shipment of 96 000 mobile phone covers. He has to repack them into boxes with 600 covers in each box. How many boxes does he need to have?

Ans: _____

21. The diagram below shows the net of a cube with a perimeter of 98 cm. What is the volume of the cube?



Ans: _____ cm^3

22. Mark's height is $\frac{3}{4}$ of Rachel's height. Gina's height is half the height of Mark. What is the ratio of Rachel's height to Gina's height to Mark's height?

Ans: _____

23. Ben bought m pens at 40 cents each. He gave the cashier \$50. What is the amount of change he received from the cashier? Express the answer in terms of m .

Ans: _____ ¢

24. The length and breadth of a rectangle are $4w$ cm and 5 cm respectively. Its area is 180 cm^2 . Find the value of w .

Ans: _____

25. An Art lesson lasts $\frac{2}{3}$ hour. An Art trainer teaches from 0800 to 1300 with an hour break daily. How many lessons does the Art trainer teach daily?

Ans: _____

Questions 26 to 30 carry 2 marks each. Show your workings clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

-
26. The ratio of the perimeter of a triangle to the perimeter of a square is 5 : 6. The perimeter of the square is 8 cm longer than the perimeter of the triangle. Find the area of the square.

Ans: _____ cm²

27. In a garden, 30% of the flowers are lilies, 25% of them are orchids and the rest of them are hibiscus. If there are 90 more hibiscus than lilies, how many flowers are there altogether?

Ans: _____

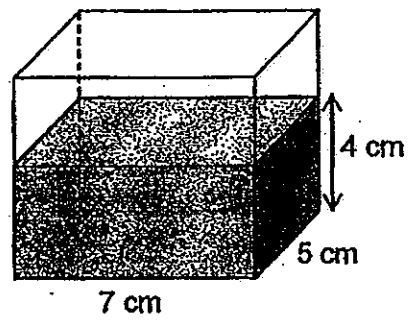
28. A ribbon which was $\frac{3}{4}$ m long was cut equally into a few pieces. Each piece was $\frac{1}{8}$ m long. How many cuts were made?

Ans: _____

29. A T-shirt cost 3 times as much as a pair of shorts. Ally spent \$96 on 2 T-shirts and 2 pairs of shorts. How much more did a T-shirt cost than a pair of shorts?

Ans: \$ _____

30. The tank below is $\frac{2}{3}$ filled with water. Minah wants to add some water to fill it to its brim. What volume of water will she need to add?



Ans: _____ cm³

End of Paper



Rosyth School
First Continual Assessment 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 1 March 2013

Parent's Signature: _____

Time: 1 h 40 min

PAPER 2

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Show your workings clearly as marks are awarded for correct working.
4. Write your answers in this booklet.
5. You are allowed to use a calculator
6. Answer all questions.

Questions	Maximum Mark	Marks Obtained
Q 1 to 5	10	
Q 6 to 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

*** This booklet consists of 16 pages (including this cover page)**

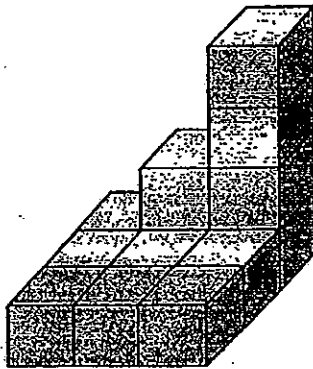
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Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

Do not write
in this space

(10 marks)

1. The solid figure shown below is made up of 1-cm cubes. The whole solid including the base, is painted green. How many cubes have two of their faces painted green?



Ans: _____

2. The ratio of the number of books to the number of magazines is 9 : 5. After half of the magazines were given away, there were 92 books and magazines left. How many books and magazines were there at first?

Ans: _____

3. Mr Tan had 495 apples and pears at his fruit stall. $\frac{1}{4}$ of the apples was equal to $\frac{2}{3}$ of the pears. He packed all the apples into packets of 3. Each packet was sold at \$1. How much would Mr Tan receive after he sold all his apples?

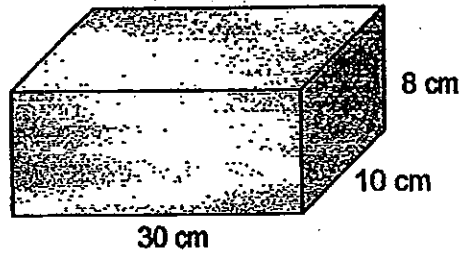
Do not write
in this space

Ans: \$ _____

4. 250 seats in a hall were filled. Twenty minutes later, 430 seats were filled. What was the percentage increase in the number of seats filled during the twenty-minute period?

Ans: _____ %

5. The container shown below measuring 30 cm by 10 cm by 8 cm was completely filled with water. The water was used to fill 3 kettles with each of them having a capacity of 250 cm^3 . What was the height of the water left in the container after all the kettles had been completely filled?



Do not write
in this space

Ans: _____ cm

Questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question.

(50 marks)

Do not write
in this space

6. Gina had 56 more stamps than John. When John gave Gina 22 of his stamps, Gina had 5 times as many stamps as John. How many stamps did John have at first?

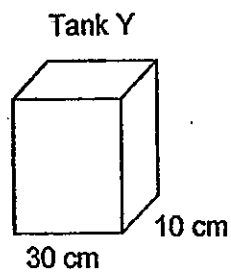
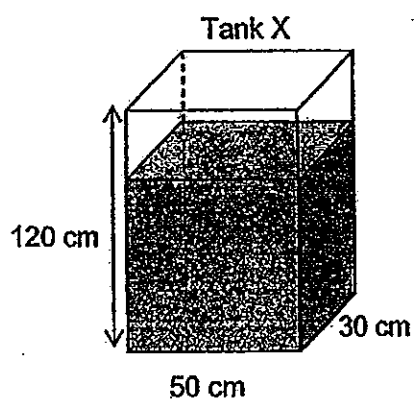
Ans: _____ [3m]

7. Mrs Lim baked some chocolate and strawberry cookies. The total of all the strawberry cookies and $\frac{3}{8}$ of the number of chocolate cookies was 430. The total of $\frac{1}{4}$ of the number of strawberry cookies and $\frac{1}{2}$ of the number of the chocolate cookies was 192. How many strawberry cookies did Mrs Lim bake?

Ans: _____ [3m]

8. Tank X measures 50 cm by 30 cm by 120 cm. It was $\frac{2}{3}$ filled with water. The water was then poured from Tank X to Tank Y until the height of the water level in Tank X became thrice as high as that in Tank Y. Find the volume of water in Tank Y. Express your answer in litres.

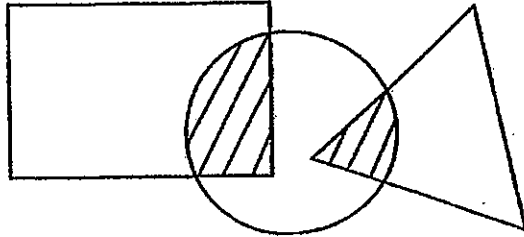
Do not write
in this space



Ans: _____ [3m]

9. The diagram below, not drawn to scale, is made up of a rectangle, a circle and a triangle. The ratio of the area of the rectangle to the area of the circle to the area of the triangle is $8 : 6 : 5$. If $\frac{1}{4}$ of the rectangle and $\frac{1}{5}$ of the triangle are shaded, what is the ratio of the shaded areas to all the unshaded areas?

Do not write
in this space



Ans: _____ [3m]

10. 3 years ago, the total age of Timothy and his brother was 12y years old. Timothy is y years old now.

(a) Find the age of Timothy's brother now.

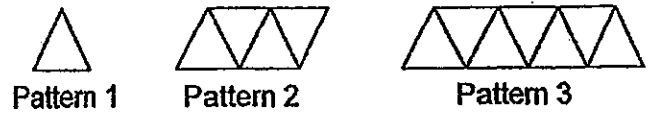
(b) Given that $y = 3$, find the age of Timothy's brother now.

Do not write
in this space

Ans: (a) _____ [2m]

(b) _____ [1m]

11. Study the pattern below and answer the following questions.



- (a) How many triangles are there in Pattern 5?
- (b) How many triangles are there in Pattern 20?
- (c) How many triangles are there in Pattern n ?

Do not write
in this space

Ans: (a) _____ [1m]
(b) _____ [2m]
(c) _____ [2m]

12. Alex and Muthu shared a box of erasers in the ratio 2 : 3. After Muthu gave $\frac{3}{4}$ of his share to Alex, Alex had 70 more marbles than Muthu.

- (a) How many marbles did Muthu give to Alex?
(b) How many marbles did they have altogether?

Do not write
in this space

Ans: (a) _____ [2m]

(b) _____ [2m]

13. Mary had some beads. She used 60% of them to make 14 necklaces. She then used 25% of the remaining beads to make bracelets. She had 84 beads left.

Do not write
in this space

(a) How many beads did she have at first?

(b) How many beads did she use for each necklace?

Ans: (a) _____ [2m]

(b) _____ [2m]

14. Maggie had a collection of seashells, bookmarks and ribbons. She had 76 seashells. 20% of her collection were bookmarks. She had 44 fewer bookmarks than ribbons.

Do not write
in this space

- (a) What was the total number of seashells, bookmarks and ribbons?
- (b) Maggie was given some bookmarks and her total collection of seashells, bookmarks and ribbons increased by 25%. What percentage of her total collection were bookmarks after that?

Ans: (a) _____ [2m]

(b) _____ [2m]

15. Marilyn had some pairs of boots. She sold them at her shop at \$69.90 each. Customers who bought 2 pairs of the boots were given a discount of \$29.90 for the second pair. She collected \$2556.80 and sold 8 pairs at a discounted rate. How many customers bought only one pair of boots?

Do not write
in this space

Ans: _____ [4m]

16. Tap A could fill half of an empty tank in 2 minutes and Tap B could fill the same empty tank in 6 minutes. Peter wanted to fill the tank completely. In the first minute, only Tap A was turned on. In the second minute, both taps were turned on. How long would it take to fill the tank completely?

Do not write
in this space

Ans: _____ [4m]

17. Ken bought a dictionary, a reference book and a storybook. The cost of a dictionary and a reference book is \$85. The cost of a reference book and a storybook is \$64. The cost of the dictionary is 4 times as much as the cost of the storybook.

Do not write
in this space

(a) What is the cost of one storybook?

(b) If Ken gave the cashier a \$100 note, how much change did he receive?

Ans: (a) _____ [2m]

(b) _____ [3m]

18. School A had a fund-raising activity. $\frac{2}{3}$ of the money was raised by

Pri 6 classes and the rest was raised by Pri 3 classes. $\frac{5}{12}$ of the money

raised by the Pri 6 classes was raised by the boys and $\frac{1}{3}$ of the money

raised by the Pri 3 classes was raised by the boys. All the girls raised a total of \$4950.

(a) How much money did all the pupils raise altogether?

(b) What is the difference between the sum of money raised by all the boys and all the girls?

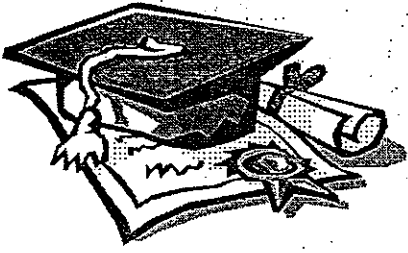
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Ans: (a) _____ [3m]

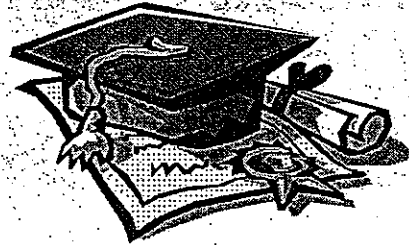
(b) _____ [2m]

End of Paper





ANSWER SHEET



EXAM PAPER 2013

SCHOOL : ROSYTH PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATHEMATICS
TERM : CA1

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	2	4	2	3	4	1	4	3	2	3	1	4	2	4

- 16. $\frac{1}{3}$
- 17. 6
- 18. 136
- 19. 10
- 20. 160
- 21. 343
- 22. 8:3:6
- 23. 5000-40m
- 24. 9
- 25. 6
- 26. 144
- 27. 600
- 28. 5
- 29. 24
- 30. 70

Paper 2

- 1. 2cubes
- 2. $18+5=23$
 $92 \div 23=4$
 $18+10=28$
 $28 \times 4=112$
- 3. $\frac{1}{4} a = \frac{2}{3} p$
 $\frac{2}{8} a = \frac{2}{3} p$

$$8+3=11$$

$$495 \div 11 = 45$$

$$45 \times 8 = 360$$

$$360 \div 3 = 120$$

4. $430 - 250 = 180$

$$180 / 250 \times 100\% = 72$$

5. $30 \times 10 \times 8 = 2400$

$$250 \times 3 = 750$$

$$2400 - 750 = 1650$$

$$1650 \div 30 \div 10 = 5.5$$

6. $4u \text{ --- } 22 + 50 + 22 = 100$

$$1u \text{ --- } 25$$

$$25 + 22 = 47$$

7. $4S + 3C = 430$

$$1S + 4C = 192$$

-----#

$$4S + 16C = 768$$

$$13C = 338$$

$$1C = 26$$

$$1S = 192 - 4 \times 26 = 88$$

$$4S = 4 \times 88 = 352$$

8. $2/3 \times 120 \times 50 \times 30 = 120000$

$$3h \times 50 \times 30 + h \times 30 \times 10 = 4800h$$

$$4800h = 120000$$

$$h = 25$$

$$25 \times 30 \times 10 = 7.5L$$

9. R:C:T

$$8:6:5$$

$$R \text{ ---- } 2:6$$

$$T \text{ ---- } 1:4$$

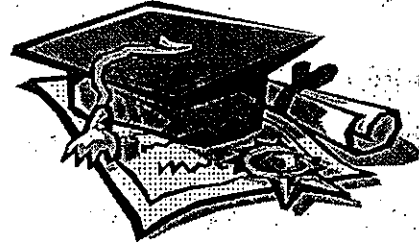
$$C \text{ ---- } 3:3$$

$$S: Un$$

$$3:13$$

10. A. $12y + 6 - y = 11u + 6$

B. $11x + 3 + 6 = 39$



11. A. $7+3+3=13$
 B. $13+3 \times 15 = 58$
 C. $1+(n-1) \times 3 = 3n-2$

12. A:M
 2:3
 8:12
 -----)
 17:3

$$17u - 3u = 14$$

$$14u \text{ ---- } 70$$

$$\text{A. } 9u \text{ --- } 45$$

$$\text{B. } 20u \text{ --- } 100$$

13. A. $3u \text{ --- } 84$

$$10u \text{ --- } 280$$

$$\text{B. } 28 \times 6 = 168$$

$$168 \div 14 = 12$$

14. A $76+44=120$

$$60\% \text{ ---- } 120$$

$$100\% \text{ --- } 200$$

$$\text{B } 125\% \text{ --- } 250$$

$$90/250 \times 100\% = 36\%$$

15. $2p \text{ --- } 109.9$

$$16p \text{ --- } 879.20$$

$$2556.8 - 899.2 = 1677.6$$

$$1677.6 \div 69.9 = 24$$

16. A. $2\text{min} \text{ ---- } \frac{1}{2} \text{ tank}$

$$1\text{min} \text{ ---- } \frac{1}{4} \text{ tank}$$

$$\text{B } 6\text{min} \text{ --- } 1\text{tank}$$

$$1\text{min} \text{ ---- } \frac{1}{6} \text{ tank}$$

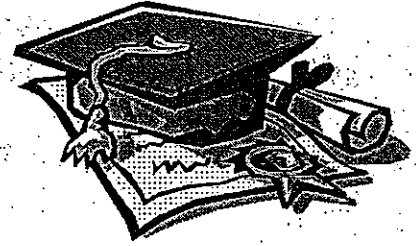
$$\frac{1}{4} + \frac{1}{6} = \frac{5}{12}$$

$$(1 - \frac{1}{4}) \div \frac{5}{12} = 1.8\text{mins}$$

$$1.80 + 1 = 2.8\text{mins}$$

17. A.) $D+R=85$

$$R+S=64$$



$$3u - 85 - 64 = 21$$

$$1u = 7$$

$$B) D + R + S = 85 + 7 = 92$$

$$100 - 92 = 8$$

$$18. A) 4 + 7 = 11u$$

$$1u = 4950 \div 11 = 450$$

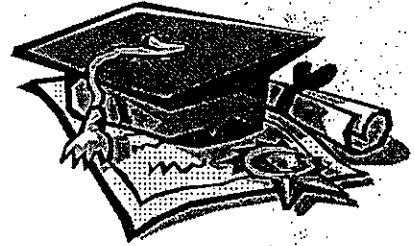
$$18u = 450 \times 18 = 8100$$

$$B) \text{ All boy } = 5 + 2 = 7u$$

$$\text{ All girl } = 4 + 7 = 11u$$

$$11u - 7u = 4u$$

$$4u = 1800$$



Anglo-Chinese School
(Junior)



SEMESTRAL ASSESSMENT 1 (2013)
PRIMARY 6

MATHEMATICS

PAPER 1
Booklet A

Thursday

8 May 2013

50 min

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO

Follow all instructions carefully.

There are 15 questions in this booklet.

Answer ALL questions.

You are not allowed to use a calculator.

Name : _____ ()

Class : 6.()

Parent's Signature: _____

This question paper consists of 8 printed pages. (Inclusive of cover page)

ACS(J) P6 SA1 Maths 2013

A 1

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer sheet. (20 marks)

1. $\frac{3}{5} + \frac{4}{5} = \frac{\square}{8}$. What is the missing number in the fraction?

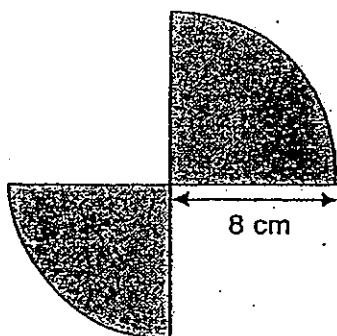
(1) 3

(2) 4

(3) 5

(4) 6

2. The figure below is made up of 2 identical quadrants. What is the area of the shaded part? Leave your answer in terms of π .



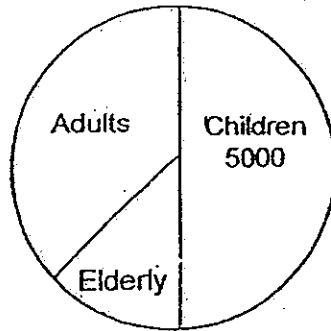
(1) $8\pi \text{ cm}^2$

(2) $16\pi \text{ cm}^2$

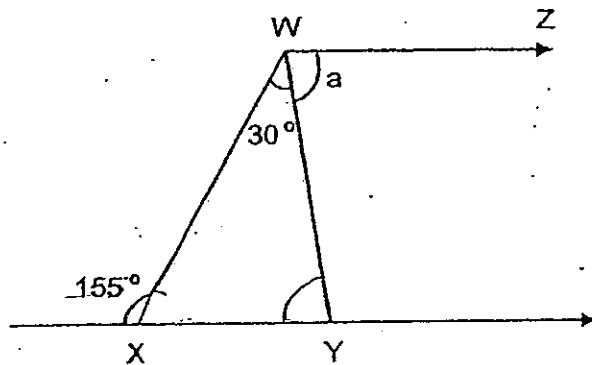
(3) $32\pi \text{ cm}^2$

(4) $64\pi \text{ cm}^2$

3. The pie chart shows the number of people who visited the Universal Studio last month. The number of elderly was $\frac{1}{4}$ the number of children. What was the number of adult who visited the Universal Studio last month?



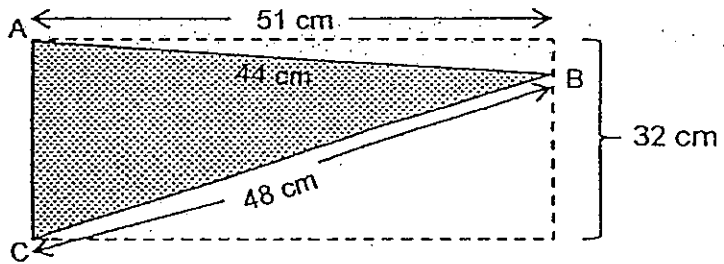
- (1) 1250
 (2) 2750
 (3) 3750
 (4) 4250
4. WXY is a triangle. WZ // XY. Find $\angle a$.



- (1) 55°
 (2) 60°
 (3) 120°
 (4) 125°

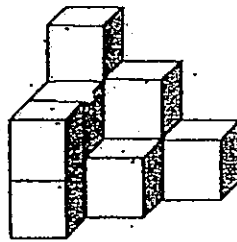
5. What is the area of the triangle ABC as shown in the figure?

- (1) 704 cm²
- (2) 768 cm²
- (3) 816 cm²
- (4) 1632 cm²

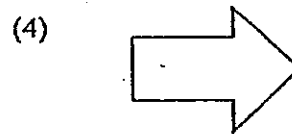
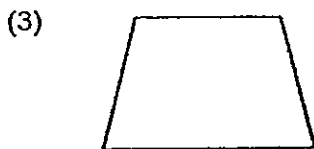
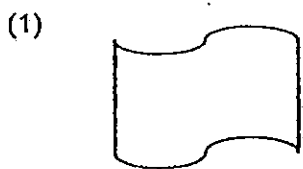


6. The figure below shows 11 identical cubes glued together to form a solid. The whole solid, including the base, is then painted green. How many cubes have exactly four of their faces painted green?

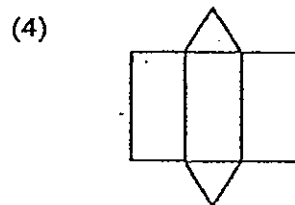
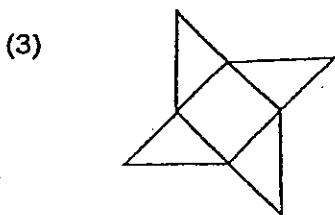
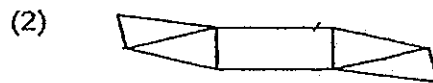
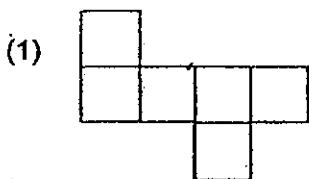
- (1) 5
- (2) 6
- (3) 3
- (4) 4



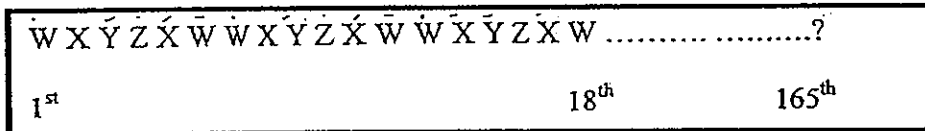
7. Which one of the following shapes cannot form tessellation(s)?



8. Jason and Sean shared \$105 in the ratio of 2 : 3. How much more money did Sean get than Jason?
- (1) \$1
 (2) \$21
 (3) \$42
 (4) \$63
9. 4 apples and 6 oranges cost \$4. How much does 10 such apples and 15 oranges cost?
- (1) \$8
 (2) \$10
 (3) \$12
 (4) \$14
10. Which of the following is not a net of a solid?



11. Peter uses four letters W, X, Y and Z to form a pattern. The first 18 letters are shown below. Which letter is in the 165th position?



- (1) W
- (2) X
- (3) Y
- (4) Z
12. $\frac{1}{5}$ of a circle is shaded. If the diameter of the circle is 10 cm, what is the area of the shaded part of the circle? (Take $\pi = 3.14$)

- (1) 15.7 cm²
- (2) 31.4 cm²
- (3) 62.8 cm²
- (4) 78.5 cm²

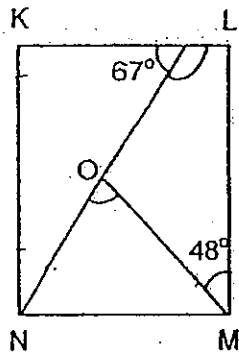
13. The rates of advertising in a magazine are as shown in the table below.

For the first 15 words	\$12.50
Every additional 5 words	\$2.50

Kendish has only \$50 and wishes to place an advertisement in the magazine, what is the maximum number of words he can have on his advertisement?

- (1) 15
- (2) 30
- (3) 75
- (4) 90
14. The pupils in a class are divided equally into Team A and Team B. The ratio of the number of boys to the number of girls in Team A is 3: 1 and in Team B is 1 : 7. What is the ratio of the number of boys to the number of girls in the class?
- (1) 1:1
- (2) 3:7
- (3) 1:2
- (4) 7:9

15. KLMN is a rectangle. Find $\angle NOM$.



- (1) 23°
- (2) 42°
- (3) 71°
- (4) 96°

Anglo-Chinese School
(Junior)



SEMESTRAL ASSESSMENT 1 (2013)
PRIMARY 6

MATHEMATICS

PAPER 1
Booklet B

Thursday

8 May 2013

50 min

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO

Follow all instructions carefully.

There are 15 questions in this booklet.

Answer ALL questions.

You are not allowed to use a calculator.

Name : _____ ()

Class : 6.(,)

Parent's Signature: _____

Booklet	Possible Marks	Marks Obtained
A	20	
B	20	
TOTAL	40	

This question paper consists of 7 printed pages. (Inclusive of cover page)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

16. Find the value of $100 - (40 + 8 \div 2) + 3 \times 8$

Ans: _____

17. Write 5 hundred, 6 tens, 7 tenths and 8 thousandths as a decimal.

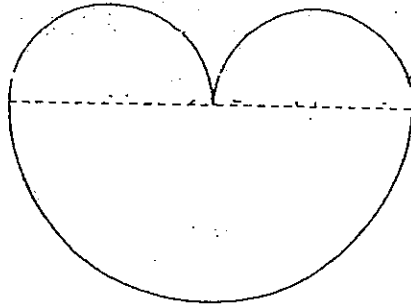
Ans: _____

18. The ratio of the volume of Cube A to the volume of Cube B is 5 : 1
if the volume of Cube A is 320 cm³, what is the length of Cube B?

Ans: _____ cm

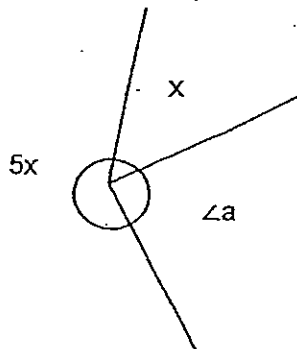
--

- 19 The figure is made up of 2 identical small semicircles and a big semicircle. If the diameter of the small semicircle is 14 cm, find the area of the figure show below. (Take $\pi = \frac{22}{7}$)



Ans: _____ cm²

- 20 If $\angle a = 2x$, find the value of x .



Ans: _____ °

Sub-total:

- 21 The distances covered by 2 children participants and 2 adult participants during a charity run were 628m, 808 m, 7.4km and 12.6km. What was the average distance covered by these participants? (Give your answers in metres)

Ans: _____,m

- 22 John has 36 coins. $\frac{5}{12}$ of them are twenty-cent coin and the rest are fifty-cent coins. How much money does John have in all?

Ans: \$ _____

- 23 Express $\frac{5}{6}$ as a percentage.

Ans: _____ %

Sub-total:

--

24 A piece of wire is bent to form the sides of a triangle in the ratio of 3 : 4 : 5. If the longest side is 35 cm, what is the length of the wire?

Ans: _____ cm

25 The ratio of Ben's mass to Noel's mass is 4:5. What percentage of Noel's mass is Ben's mass?

Ans: _____ %

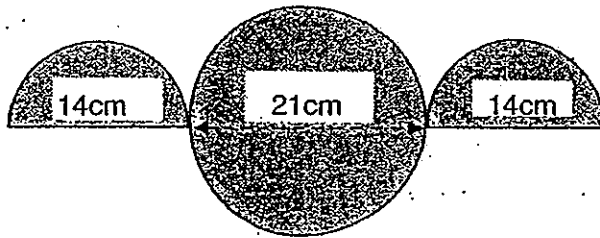
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Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 26 At a dinner party, every 6th guest gets a cup and every 8th guest gets a mug. Linda was the first guest to receive both the cup and the mug. What was Linda's position as a guest at the party?

Ans: _____

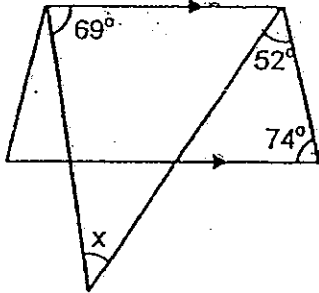
- 27 The figure consists of 2 small semicircles and one circle with diameters 14 cm and 21 cm respectively. What is the perimeter of the shaded figure? (Take $\pi = \frac{22}{7}$)



Ans: _____ cm

Sub-total:

- 28 In the figure, ABCD is a trapezium. Find $\angle x$.



Ans: _____ °

- 29 A box contains black, grey and white erasers. The ratio of the number of black erasers to the number of gray erasers is 2 ; 5. Half of the total number of the erasers is white. What is the ratio of the number of black erasers to the number of white erasers?

Ans: _____

- 30 Ali, William and Jeremy shared \$300. Ali received $\frac{4}{5}$ of the amount of money William received and Jeremy received 40% of the total amount of money. How much money did Ali receive?

Ans: \$ _____

END OF PAPER

Sub-total:

Anglo-Chinese School
(Junior)



SEMESTRAL ASSESSMENT 1 (2013)
PRIMARY 6

MATHEMATICS

PAPER 2

Thursday

8 May 2013

1 hr 40 min

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO

Follow all instructions carefully.

There are 18 questions in this booklet.

Answer ALL questions.

You are allowed to use a calculator.

Name : _____ ()

Class : 6.()

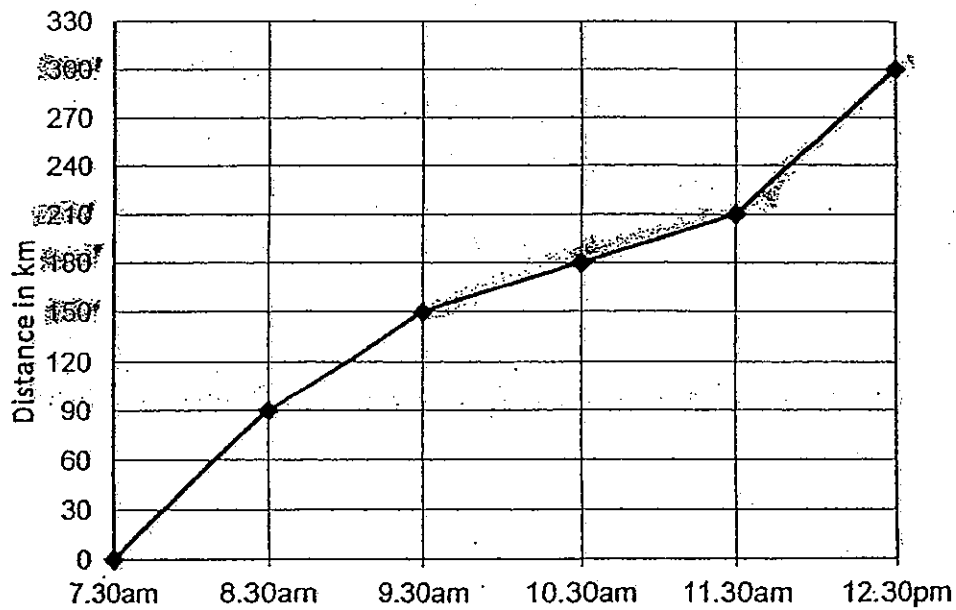
Parent's Signature: _____

Paper	Possible Marks	Marks Obtained
1.	40	
2	60	
TOTAL	100	

This question paper consists of 14 printed pages. (Inclusive of cover page)

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

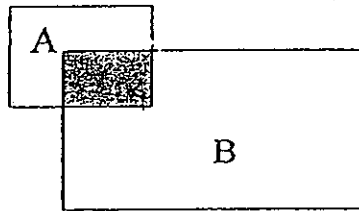
- 1 A motorist travelled from Town A to Town B. The line graph below shows the distance travelled by him from 7.30am to 12.30pm.



Find his average speed for the last 3 hours of his journey.

Ans: _____

- 2 The figure is made up of rectangle A and rectangle B. $\frac{2}{9}$ of the rectangle B is shaded and $\frac{4}{7}$ of the rectangle A is unshaded. What is the ratio of the area of shaded part to the area of the unshaded part of the figure?



Ans: _____

- 3 Mr Lim had \$688 and Mrs Lim had \$326. How much more money must Mr Lim give to Mrs Lim such that he had \$120 more than Mrs Lim?

Ans: \$ _____

--

- 4 $\frac{3}{5}$ of Timothy's marks is equal to $\frac{1}{2}$ of Zachary's mark's. If Zachary has 8 more marks than Timothy, what is Timothy's marks?

Ans: _____

- 5 Jane wants to buy 10 boxes of pears but is short of \$21.20. If she buys 3 boxes of pears, she will have \$99.20 left. How much money does Jane have?

Ans: \$ _____

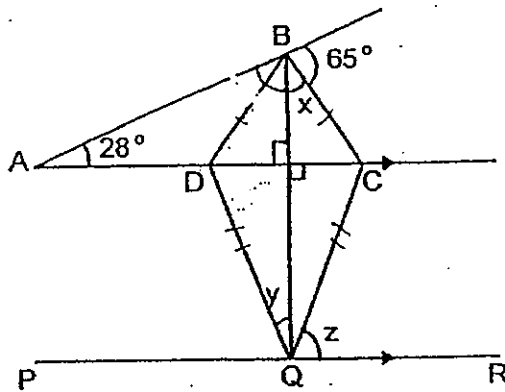
--

For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided.
 The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

- 6 There were 25 questions in a Science quiz. 4 marks were awarded for each correct answer and 1 mark was deducted for each incorrect answer. Amy scored 60 marks. How many questions did she answer incorrectly?

Ans: _____ [3]

- 7 In the figure below, ~~DB = BC~~ $DB = BC$. $DQ = CQ$. Find the sum of the angles x , y and z .



Ans: _____ [3]

--

- 8 Some girls sew a pillowcase for their home economics lessons.
 Amelia used 800cm of cloth. She used $\frac{4}{5}$ as much cloth as the amount Blanca used. Claris used $\frac{3}{10}$ of the amount of cloth that Blanca used. What was the average amount of cloth used by each girl?

Ans: _____ [3]

- 9 The table shows the number of fish in an aquarium.

Type of fishes	Quantity
	Quantity Sold
Goldfish	28
Guppy	50
Angelfish	22

- (a) What is the ratio of the number of goldfish to the total number of fish?
 Express your answer in simplest form.
- (b) How many more goldfish must be added so that the ratio of the number of goldfish to the total number of fish becomes 5 : 14?

Ans: (a) _____ [1]

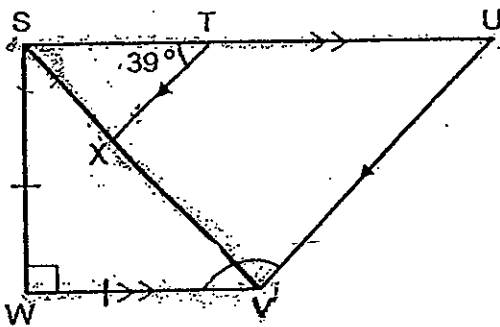
(b) _____ [2]

--

10. There are blue, red and pink balls in a box. 40% of the balls are blue. The number of blue balls is 20 more than the number of pink balls. There are 50 red balls. What is the number of pink balls in the box?

Ans: _____ [3]

11. SVW is an isosceles triangle. $SU \parallel WV$ and $TX \parallel UV$. Find $\angle UWW$.



Ans: _____ [4]

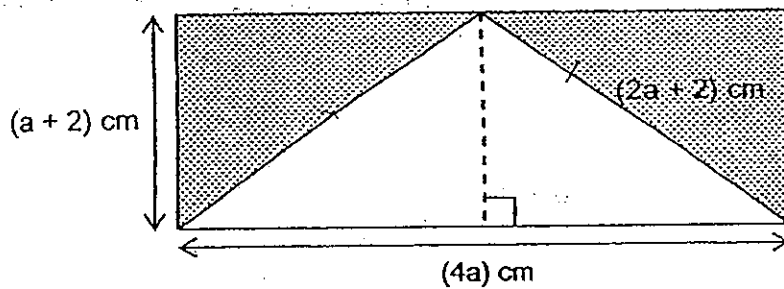
- 12 Jonathon had \$8 in his piggy bank at the end of last month. This month, his mother wanted to encourage him to save more money. For every \$6 Jonathon saved, his mother would give another \$3 to him. How much did Jonathon save on his own in this month if he had \$90 in his piggy bank at the end of this month?

Ans: _____ [4]

Sub-Total:

--

13. The figure below is made up of a rectangle and an isosceles triangle. The length of the rectangle is $(4a)$ cm and its breadth is $(a + 2)$ cm.



- a) Find the perimeter of the shaded part.
Leave your answer in the simplest form in terms of a .
- b) If $a = 2$, find the perimeter of the shaded part.

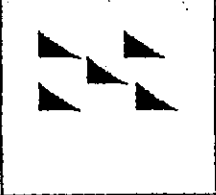
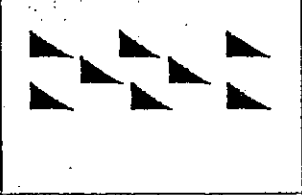
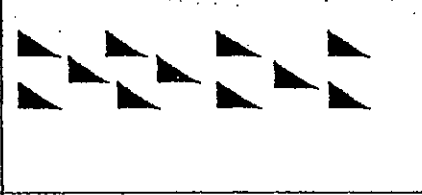
Ans: a) _____ [2]

b) _____ [2]

- 14 Khamed and Arafin started cycling from the same place but in the opposite directions. After 4 hours, they were 174 km apart. Khamed's average cycling speed was 12.5 km/h slower than Arafin's. What was Arafin's average cycling speed?

Ans: _____ [4]

15 The pattern below is made up of triangles.

			
Pattern	1 st	2 nd	3 rd

- (a) How many triangles are there in the 6th pattern?
- (b) How many triangles are there in the 51st pattern?
- (c) Which pattern is made of 569 triangles?

Ans: (a) _____ [1]

(b) _____ [2]

(c) _____ [2]

- 16 Ken spent $\frac{1}{4}$ of his money and an additional \$6 on a number of CDs. He then spent $\frac{3}{5}$ of the remaining money and an additional \$12 on magazines. Given that he was left with \$18, what fraction of his money was spent on the magazines?

Ans: _____ [4]

17

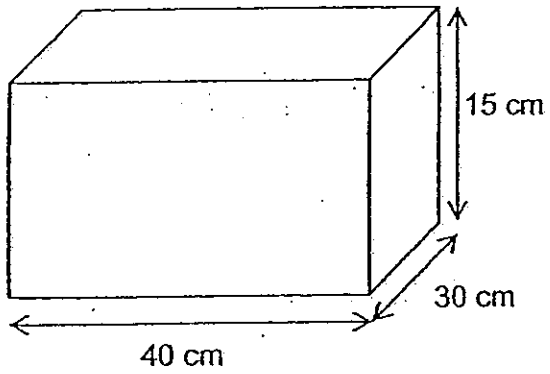
Jason and his brother, Gabriel shared a number of stamps in the ratio of 3: 2. After Jason and Gabriel bought 3 stamps and 14 stamps respectively, the ratio became 6 : 5. How many stamps did Gabriel have in the end?

Ans: _____ [5]

Sub-Total:

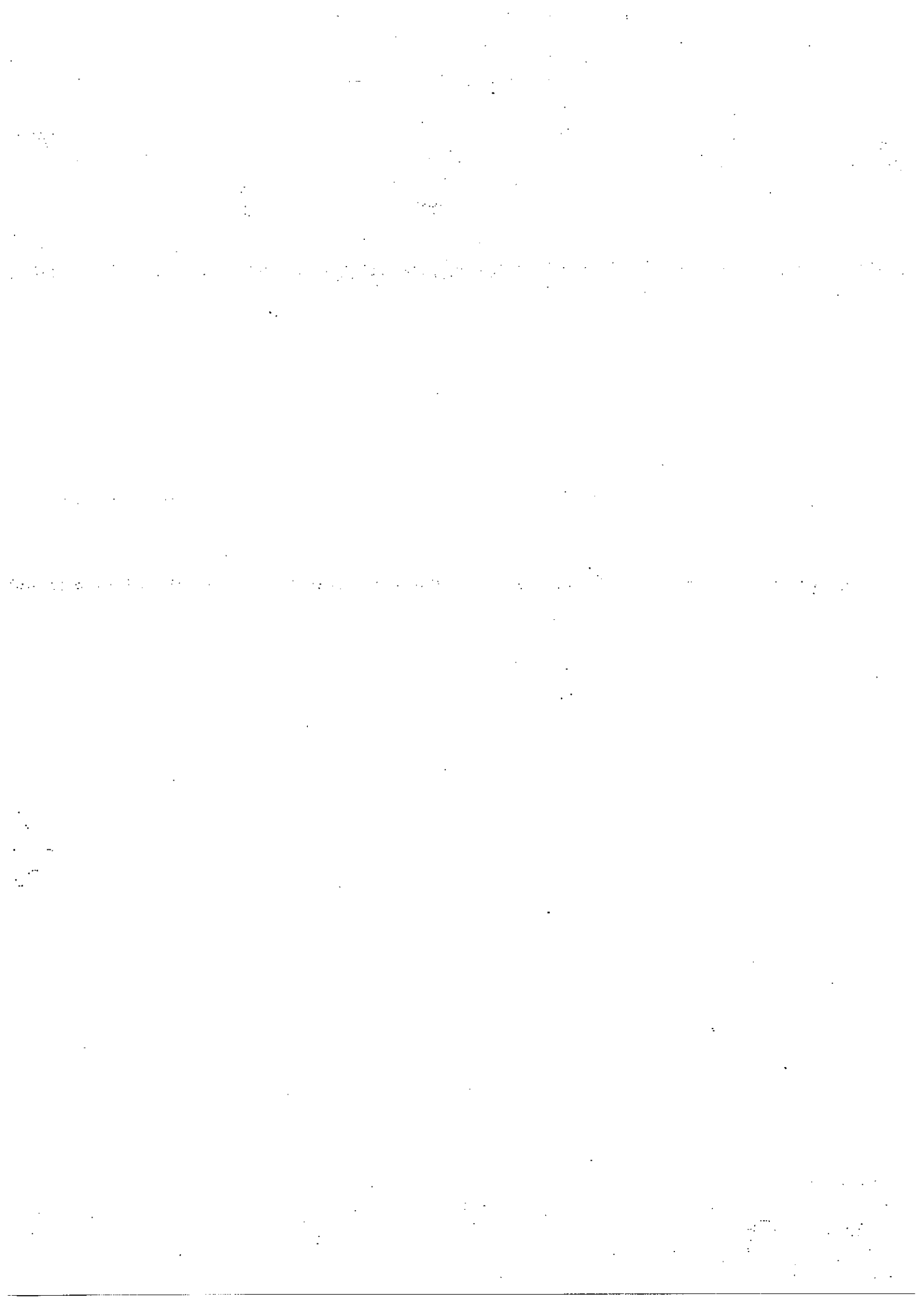
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- 18 A tank was 80% full of water. Ali poured 280 cm^3 of water into the tank of water.
- (a) How much more water was needed to fill up the tank completely?
- (b) Ali used a mug with a capacity of 160 ml to fill up the tank completely. How many mugs of water were needed to fill up the tank?



Ans: (a) _____ [2]

(b) _____ [3]



Exam Paper 2013 Answer Sheet

School: ANGLO-CHINESE SCHOOL (JUNIOR)
Subject: PRIMARY 6 MATHEMATICS
Term: SA1

Paper 1

1)	4	6)	4	11)	3
2)	3	7)	2	12)	1
3)	3	8)	2	13)	4
4)	4	9)	2	14)	4
5)	3	10)	3	15)	3

16. 80

17. 560.708

18. 4

19. 462

20. 45

21. 5359

22. 13.50

23. 568

24. 84

25. 80

26. 24th

$$\begin{aligned} 27. 14 \times {}^{22}P_7 &= 44 \\ 44 + 14 + 14 &= 72 \\ 21 \times {}^{22}P_7 &= 66 \\ 66 + 72 &= \mathbf{138} \end{aligned}$$

$$\begin{aligned} 28. 180 - 74 &= 106 \\ 106 - 52 &= 54 \\ 54 + 69 &= 123 \\ 180 - 123 &= \mathbf{57} \end{aligned}$$

29. 2 : 7

30. 100 - 40 = 60



$$300 \times \frac{60}{100} = 180$$

$$180 \div (4 + 5) = 20$$

$$20 \times 4 = 80$$

Paper 2

1. $180 \text{ km} - 150 \text{ km} = 30 \text{ km}$
 $210 \text{ km} - 180 \text{ km} = 30 \text{ km}$
 $300 \text{ km} - 210 \text{ km} = 90 \text{ km}$
 $90 \text{ km} + 30 \text{ km} + 30 \text{ km} = 150 \text{ km}$
 $150 \text{ km} \div 3\text{h} = \mathbf{50 \text{ km/h}}$

2. $6 : 29$

3. $\$688 - \$120 = \$568$
 $\$568 + \$326 = \$894$
 $\$894 \div 2 = \447
 $\$447 + \$120 = \$567$
 $\$688 - \$567 = \mathbf{\$121}$

4. $8 \times 5 = \mathbf{40}$

5. $\$99.20 + \$21.20 = \$120.40$
 $10 - 3 = 7$
 $\$120.40 \div 7 = \17.20
 $\$17.20 \times 3 = \51.60
 $\$51.60 + \$99.20 = \mathbf{\$150.80}$

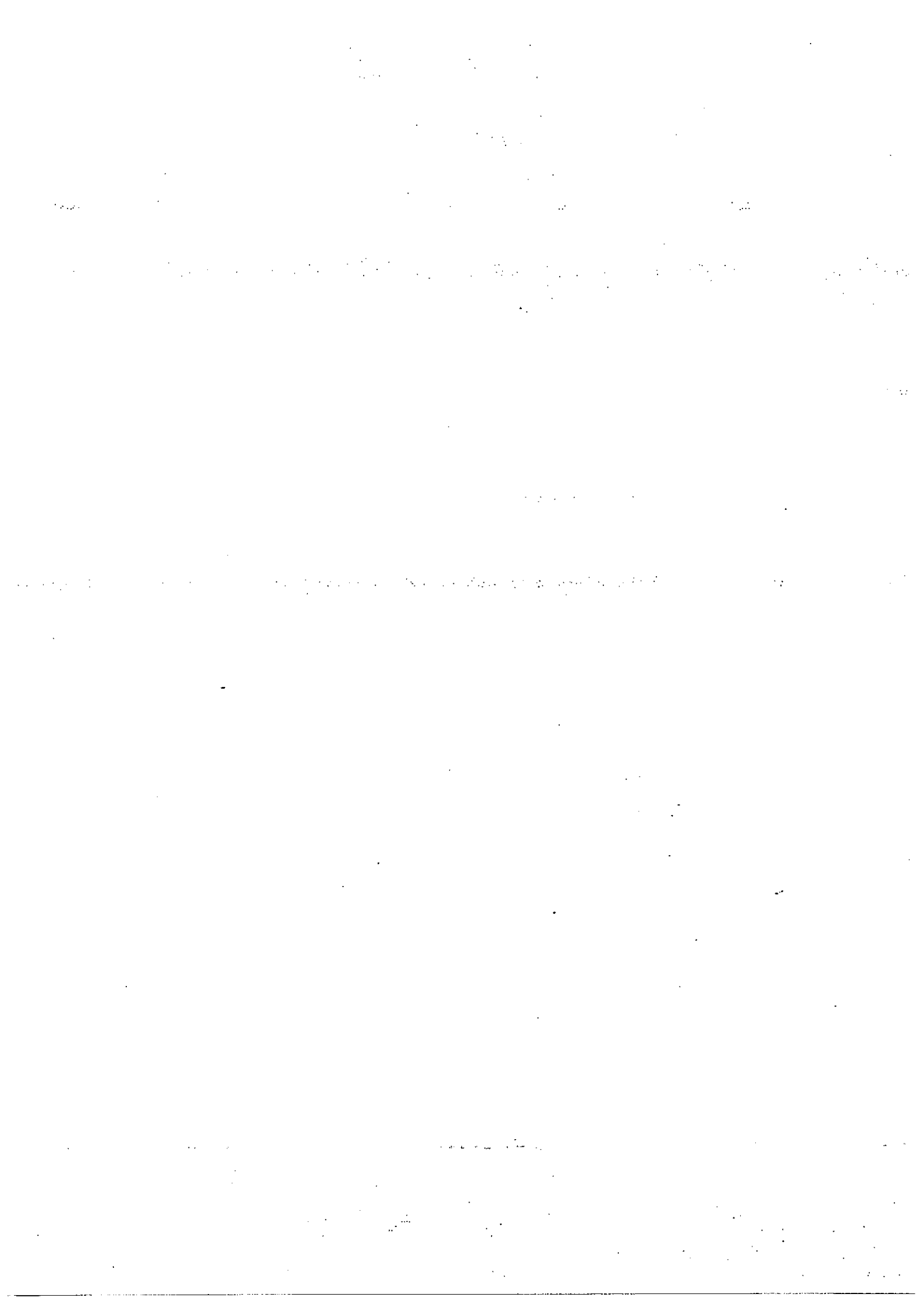
6. $25 \times 4 = 100$
 $100 - 60 = 40$
 $1 + 4 = 5$
 $40 \div 5 = \mathbf{8 \text{ questions}}$

7. $180^\circ - 90^\circ = 90^\circ$
 $28^\circ + 90^\circ = 118^\circ$
 $180^\circ - 118^\circ = 62^\circ$
 $62^\circ + 65^\circ = 127^\circ$
 $180^\circ - 127^\circ = 53^\circ$
 $53^\circ + 90^\circ = \mathbf{143^\circ}$

8. $800 \text{ cm} \div 8 = 100 \text{ cm}$
 $100 \text{ cm} \times (8 + 10 + 3) = 2100 \text{ cm}$
 $2100 \text{ cm} \div 3 = \mathbf{700 \text{ cm}}$

9. (a) $28 + 50 + 22 = 100$
 $28 : 100 = 14 : 50 = \mathbf{7 : 25}$

(b) $28 \div 7 = 4$
 $4 \times (10 - 7) = \mathbf{12 \text{ goldfish}}$



10. $1u + 20 = 40\%$
 $2u + 40 = 80\%$
 $100\% - 80\% = 20\%$
 $50 - 20 = 30$
 $30 \div 20\% = 1.5$
 $1.5 \times 40\% = 60$
 $60 - 20 = 40$ pink balls

11. $180^\circ - 90^\circ = 90^\circ$
 $90^\circ \div 2 = 45^\circ$
 $45^\circ + 39^\circ = 84^\circ$
 $180^\circ - 84^\circ = 96^\circ$
 $180^\circ - 96^\circ = 84^\circ$
 $180^\circ - 84^\circ = 96^\circ$
 $96^\circ + 45^\circ = 141^\circ$

12. $\$90 - \$8 = \$82$
 $\$82 \div (\$6 + \$3) \approx 9$
 $\$9 \times 9 = \81
 $\$82 - \$81 = \$1$
 $\$3 \times 9 = \27
 $\$81 - \$27 = \$54$
 $\$54 + \$1 = \$55$

13. (a) $a + 2 + 4a + a + 2 + 2a + 2 + 2a + 2 = (10a + 8)$ cm

(b) $10 \times 2 = 20$
 $20 + 8 = 28$ cm

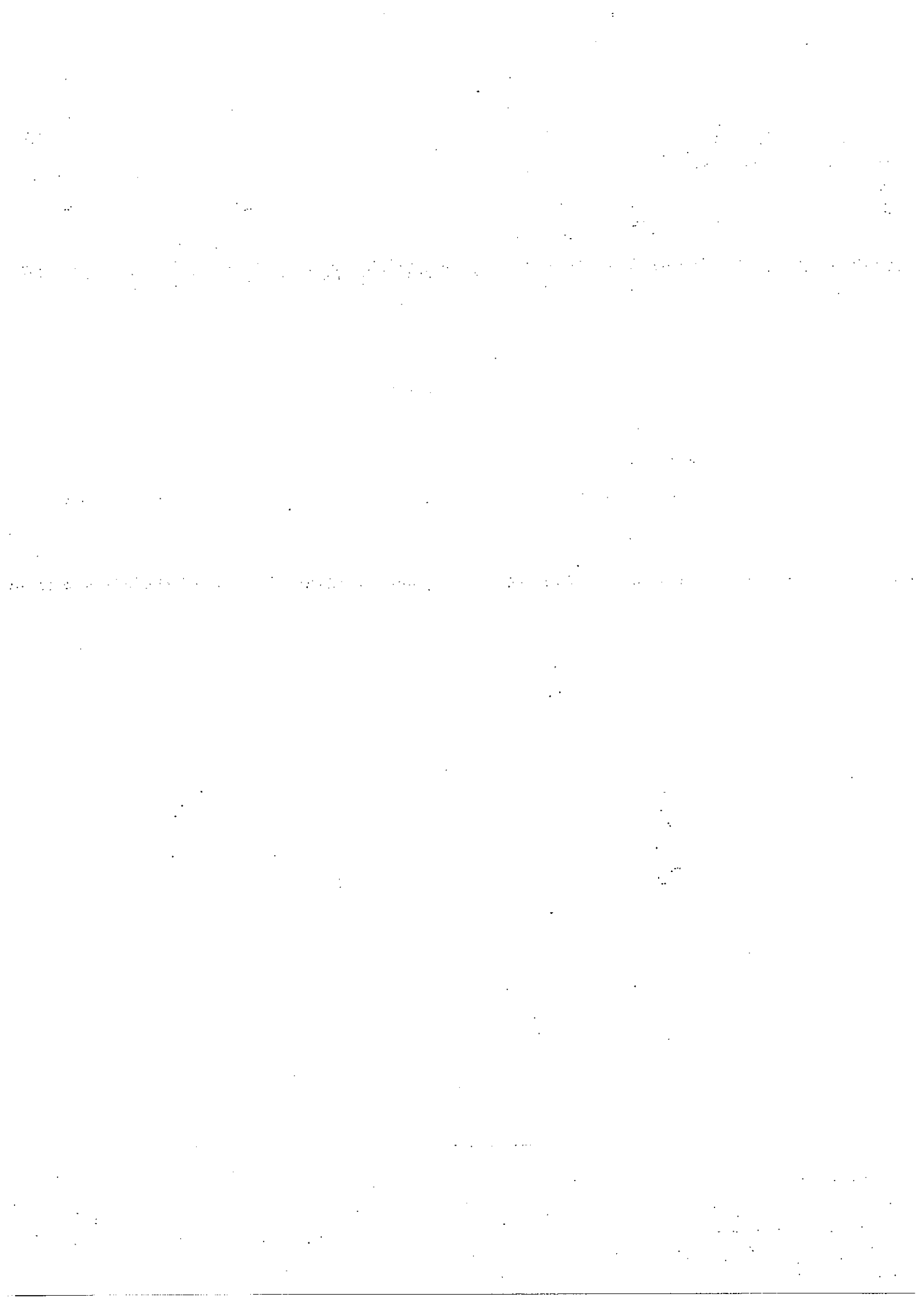
14. $12.5 \text{ km} \times 4 = 50 \text{ km}$
 $174 \text{ km} - 50 \text{ km} = 124 \text{ km}$
 $124 \text{ km} \div 2 = 62 \text{ km}$
 $62 \text{ km} \div 4 \text{ h} = 15.5 \text{ km/h}$
 $15.5 \text{ km/h} + 12.5 \text{ km/h} = 28 \text{ km/h}$

15. (a) $6 \times 3 = 18$
 $18 + 2 = 20$ triangles

(b) $51 \times 3 = 153$
 $153 + 2 = 155$ triangles

(c) $569 - 2 = 567$
 $567 \div 3 = 189^{\text{th}}$ pattern

16. $\$18 + \$12 = \$30$
 $\$30 \div 2 = \15
 $\$15 \times 5 = \75
 $\$75 + \$6 = \$81$
 $\$81 \div 3 = \27
 $\$27 \times 4 = \108



$$\$15 \times 3 = \$45$$

$$\$45 + \$12 = \$57$$

$$\frac{57}{108} = \frac{19}{36}$$

$$17. 3u + 3 = 6p$$

$$15u + 15 = 30p$$

$$2u + 14 = 5p$$

$$12u + 84 = 30p$$

$$12u + 84 = 15u + 15$$

$$15u - 12u = 3u$$

$$84 - 15 = 69$$

$$69 \div 3 = 23$$

$$23 \times 2 = 46$$

$$46 + 14 = 60$$

$$18. (a) 15 \times 30 \times 40 = 18000 \text{ cm}^2$$

$$18000 \text{ cm}^2 \times \frac{80}{100} = 14400 \text{ cm}^2$$

$$14400 \text{ cm}^2 = 14400 \text{ ml}$$

$$18000 \text{ cm}^2 = 18000 \text{ ml}$$

$$280 \text{ cm}^2 = 280 \text{ ml}$$

$$18000 \text{ ml} - 14400 \text{ ml} = 3600 \text{ ml}$$

$$3600 \text{ ml} - 280 \text{ ml} = 3320 \text{ ml}$$

$$(b) 3320 \text{ ml} \div 160 \text{ ml} = 20\frac{3}{4} \text{ mugs of water}$$





AI TONG SCHOOL

2013

SEMESTRAL ASSESSMENT 1

PRIMARY 6

**MATHEMATICS
Paper 1
(Booklets A and B)**

DURATION : 50 min

DATE : 15 May 2013

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are not allowed to use a calculator.

Name : ()

Class : Primary 6 () / 6M ()

Parent's Signature :
Date :

Paper 1	40
Paper 2	60
Total	100

Paper 1

Booklet A

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

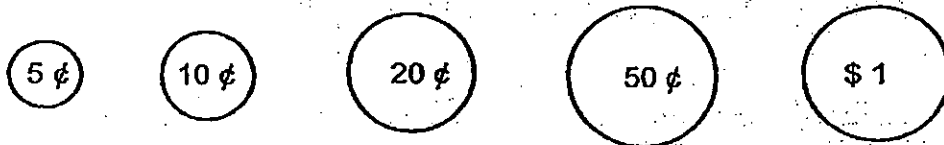
1 In 62.78, what does the digit '8' stand for?

- (1) 8 hundredths
- (2) 8 tenths
- (3) 8 ones
- (4) 8 tens

2 Which of the following has the same value as 5030 g?

- (1) 5 kg 3 g
- (2) 5 kg 30 g
- (3) 50 kg 3 g
- (4) 50 kg 30 g

3 Sammie had only the following five coins.

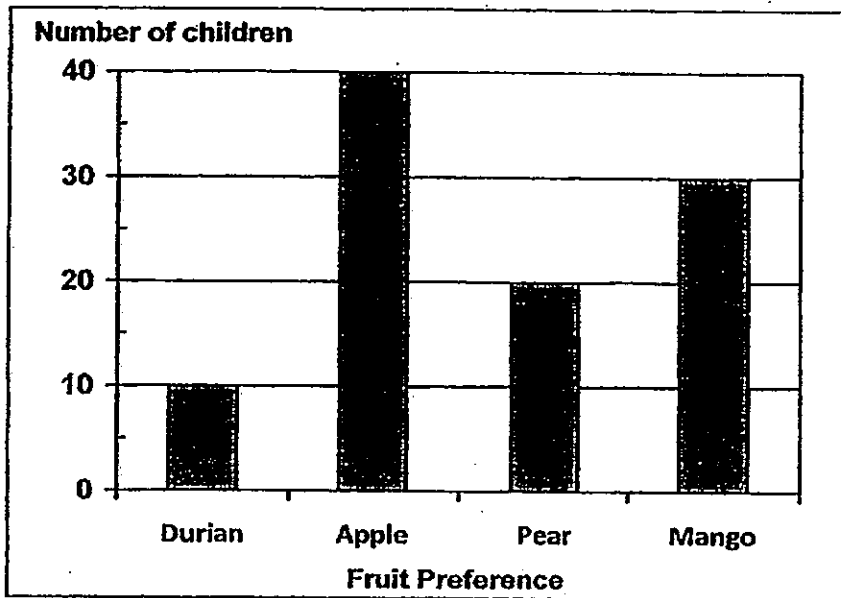


She gave three coins to her sister. Which of the following is the amount she had given to her sister?

- (1) 55¢
- (2) 75¢
- (3) \$1.05
- (4) \$1.35

Use the information below to answer Questions 4 and 5.

The bar graph below shows the fruit preference of a number of children.



4 Based on the bar graph, the number of children who prefer Apple is _____ of the number of children who prefer Mango.

(1) $\frac{4}{7}$

(2) $\frac{3}{4}$

(3) $\frac{4}{3}$

(4) $\frac{7}{4}$

5 Which choice of fruit makes up 20% of the total number of fruits?

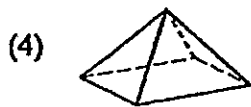
(1) Pear

(2) Apple

(3) Mango

(4) Durian

6 Which of the following is not a prism?



7 Malcolm and Sean took part in a 15-minute quiz. On average, Malcolm answered 4 more questions than Sean, for every minute. If both of them answered a total of 250 questions, how many questions did Sean answer?

- (1) 60
- (2) 95
- (3) 155
- (4) 190

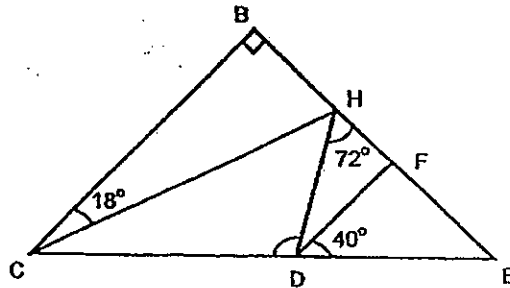
8 The number of rulers is $\frac{1}{3}$ the number of pencils. If the ratio of the number of erasers to the number of pencils is 3 : 4, what is the ratio of the number of rulers to the number of erasers?

- (1) 1 : 3
- (2) 3 : 1
- (3) 4 : 9
- (4) 9 : 4

- 9 The number of cars sold in May was 150. In June, the number of cars sold decreased to 120. Find the percentage decrease in the number of cars sold between May and June.
- (1) 20%
 - (2) 25%
 - (3) 30%
 - (4) 80%
- 10 Hock Sim has \$ w . Chia Poh has 4 times as much money as Hock Sim. Macey has \$25 more than Chia Poh. How much does Macey have in terms of w ?
- (1) $\$(4 + w)$
 - (2) $\$(25 + w)$
 - (3) $\$(25 + 4w)$
 - (4) $\$(100 + w)$
- 11 A cat is chasing a rat. They are 135 metres apart. For every 9 metres that the cat runs, the rat runs 6 metres. How much further must the cat run in order to catch the rat?
- (1) 45 m
 - (2) 54 m
 - (3) 270 m
 - (4) 405 m

12 The figure below is not drawn to scale BCDF is a trapezium. Find $\angle CDH$.

- (1) 108°
- (2) 122°
- (3) 126°
- (4) 162°



13 Singapore and Kuala Lumpur is 315 km apart. A motorist travelled for 1.5 hours from Singapore towards Kuala Lumpur at a speed of 120 km/h. How far more must he travel to reach Kuala Lumpur?

- (1) 135 km
- (2) 180 km
- (3) 195 km
- (4) 315 km

14 The ratio of the number of children to the number of adults at a funfair was 2 : 3. $\frac{2}{5}$ of the children were boys. If there were 125 more adults than children, how many girls were there at the funfair?

- (1) 100
- (2) 125
- (3) 150
- (4) 375

15 Shalene is m years old. Her mother is 32 years older than her. What was their total age 8 years ago in terms of m ?

- (1) $(2m + 16)$ years
- (2) $(2m + 24)$ years
- (3) $(2m + 32)$ years
- (4) $(2m + 48)$ years

Booklet B

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (10 marks)

- 16 Bakery Bliss made 126 720 cupcakes last year. Express this number to the nearest ten thousand.

Ans: _____

- 17 Find the value of $\frac{4}{7} + \frac{2}{3}$.

Ans: _____

- 18 What is the missing number in the box?

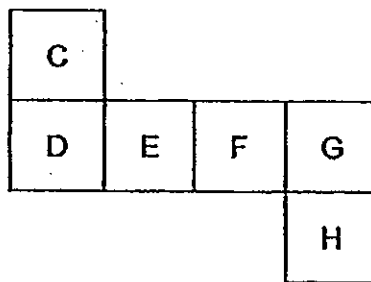
$$6.52 \times 3 = 195.6 \times \square$$

Ans: _____

- 19 Each pack of 5 toy cars is sold for \$9. Joshua has \$47. How many toy cars can Joshua buy at most?

Ans: _____

- 20 The figure below shows the net of a cube. If the letter 'D' is at the top of the cube, which letter is at the bottom of the cube?

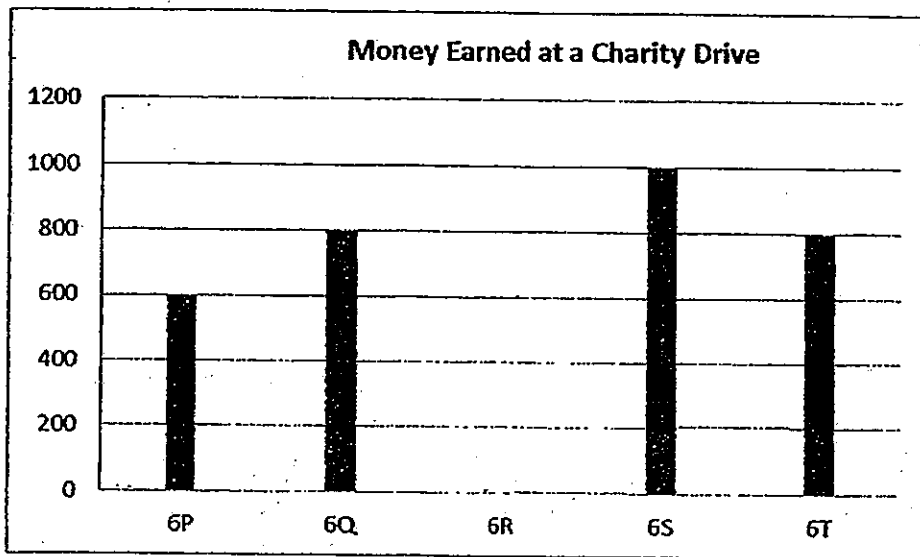


Ans: _____

21 What is the value of $156 - 18 + 6 \times (3 + 13)$?

Ans: _____

22 The bar graph below shows the amount of money earned by 5 classes during a charity drive.



If the total amount of money earned by the 5 classes is \$3600, draw the bar in the graph to represent the amount Class 6R earned.

23 7 similar blouses cost \$126. What is the cost of 3 such blouses?

Ans: \$ _____

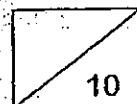
24 Express $\frac{2}{5}\%$ as a decimal.

Ans: _____

25 Triangle A has a base of 6 cm and a height of r cm. Triangle B has an area that is $(5r + 7)$ cm² more than the area of Triangle A. Find the area of Triangle B in terms of r .

Ans: _____ cm²

Total:



Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 26 There are a total of 84 marbles in Bag E and Bag F. Bag F and Bag G have a total of 82 marbles while Bag G and Bag H have 85 marbles. How many marbles are there in Bag E and Bag H altogether?

Ans: _____

- 27 Harry has a box measuring 11 cm by 6 cm by 4 cm. He wants to fill the box with cubes of edge 2 cm. What is the maximum number of cubes that can fit into the box?

Ans: _____

- 28 3 identical rectangles are each divided into equal parts. The shaded parts represent a fraction for each figure. Shade the number of equal parts in Figure C to show the sum of the fractions represented by the shaded parts in Figure A and Figure B.

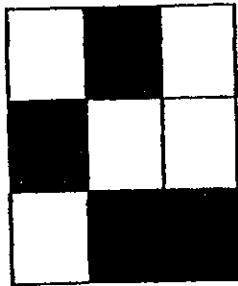


Figure A

+

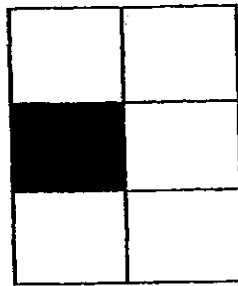


Figure B

=

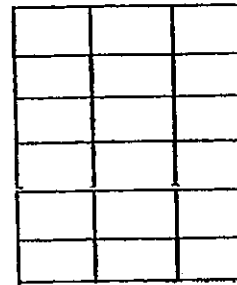


Figure C

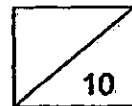
-
- 29 Jen baked 77 blueberry muffins and chocolate muffins. After giving away 12 blueberry muffins, there were $\frac{2}{3}$ as many blueberry muffins as chocolate muffins left. How many chocolate muffins did Jen bake?

Ans: _____

- 30 Mother bought $\frac{1}{5}$ kg of prawns and 3 kg of squids for \$43. 1 kg of prawns and 3 kg of squids cost \$67. Find the cost of 1 kg of prawns.

Ans: \$ _____

Total:





AI TONG SCHOOL

2013

SEMESTRAL ASSESSMENT 1

PRIMARY 6

MATHEMATICS

Paper 2

DURATION : 1 h 40 min

DATE : 15 May 2013

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are allowed to use a calculator.

Name : _____ ()

Class : Primary 6 () / 6M ()

Parent's Signature : _____
Date : _____

Total	60
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Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

Do not write in this space

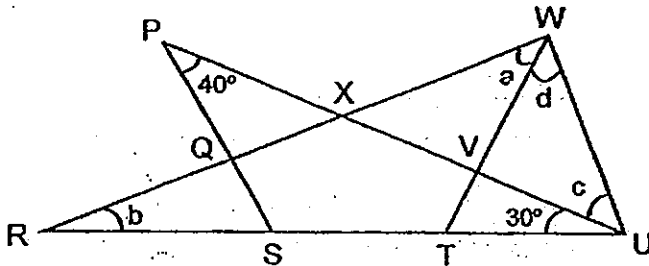
(10 marks)

- 1 Nicholas scored an average of 165 points for his first 11 online games. How many points must he score on his 12th game to obtain an average of 248 points for all 12 games?

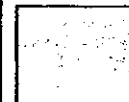
Ans: _____



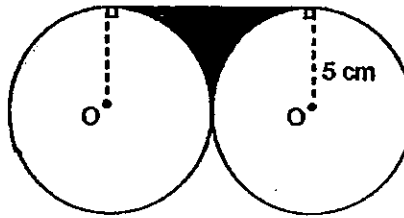
- 2 The figure below is not drawn to scale. It is made up of straight lines, forming triangles. $\angle PUR = 30^\circ$ and $\angle UPS = 40^\circ$. Find the value of $\angle a + \angle b + \angle c + \angle d$.



Ans: _____



- 3 The figure is made up of 2 identical circles with 'O' as the centre of the circles. The radius of each circle is 5 cm. Find the perimeter of the shaded area. (Take $\pi = 3.14$)



Do not write in this space

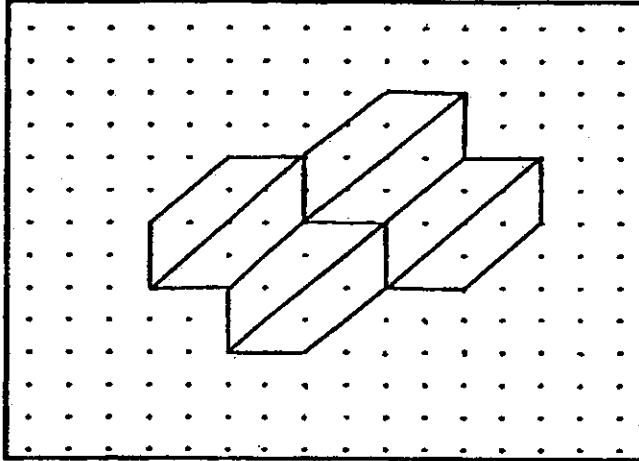
Ans: _____ cm

- 4 $\frac{3}{7}$ of Shermaine's money is $\frac{5}{9}$ of Ryan's money. What is the ratio of Ryan's money to Shermaine's money?

Ans: _____

5 Form a tessellation by drawing 2 more unit shapes in the space provided in the box.

Do not write in this space.



For questions 6 to 18, show your working clearly in the space provided for each question and write the answers in the spaces provided. The number of marks available is shown in the brackets [] at the end of each question or part-question. (50 marks)

Do not write in this space.

- 6 James used $\frac{3}{8}$ of his money to buy a birthday present. He then lent $\frac{4}{7}$ of the remainder to his friend and found that he had \$45 left. What was his original amount of money?

Ans: _____ [3]

- 7 Meixin, Isabel and Devi had some stamps in the ratio of 2 : 5 : 7. After Mr Lim gave the girls 8 stamps each, the ratio of the number of stamps Meixin had to the number of stamps Isabel had to the number of stamps Devi had become 10 : 19 : 25. Find the total number of stamps they had at first.

Ans: _____ [3]

- 8 Construct a square PQST and an equilateral triangle QSR.
Square PQST shares side QS with the equilateral triangle QSR.
QS = 4 cm.

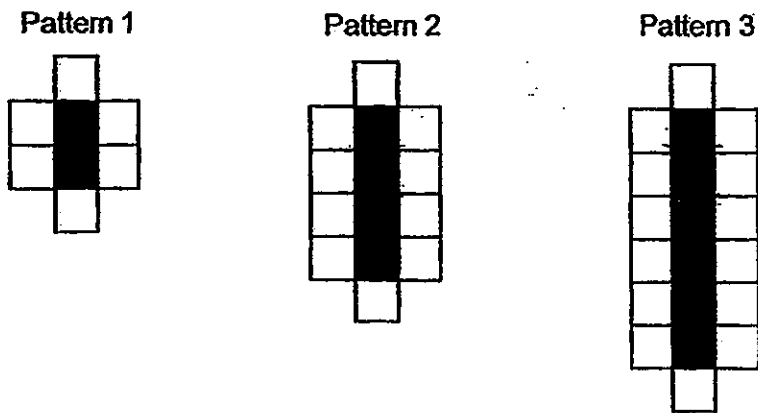
Do not write in
this space

[3]



9 Black and white squares are used to form the pattern as shown below.

Do not write in this space



- (a) How many black squares will there be in Pattern 5?
- (b) If there are 86 white squares, which pattern will be formed?

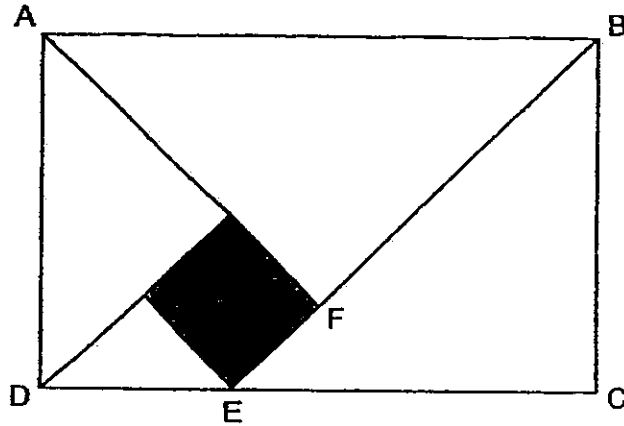
Ans: (a) _____ [1]

(b) _____ [2]

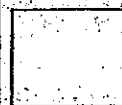


- 10 In the figure below, not drawn to scale, Rectangle ABCD is made up of 4 isosceles right-angled triangles and a square. The ratio of the area of Triangle ABF to the area of Triangle BCE is 9 : 8. The perimeter of the square is 56 cm. Find the area of Rectangle ABCD.

Do not write in this space



Ans: _____ [3]



- 11 Kenneth's savings was $\frac{7}{10}$ of Eric's savings. After Kenneth increased his savings by 10% and Eric's savings decreased by 25%, Kenneth's savings was \$900 more than Eric's. What was Kenneth's savings in the end?

Do not write in this space

Ans: _____ [4]



- 12 For every box of cookies Colleen sells, he earns \$1.40. A bonus of \$4 is given to him for every 25 boxes of cookies sold. How many boxes of cookies must he sell to earn \$964?

Do not write in
this space

Ans: _____ [4]



- 13 Wei Kang bought three times as many notebooks as storybooks and spent a total of \$186. He spent \$42 more on the storybooks than the notebooks. Given that a storybook cost \$9 more than a notebook, find the cost of a notebook.

Do not write in
this space

Ans:

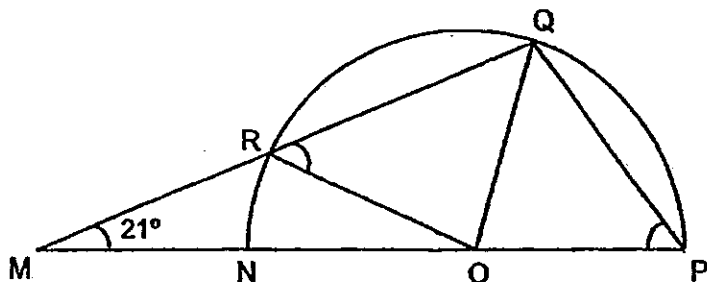
[5]



14 in the figure below not drawn to scale, O is the centre of the semi-circle. MRQ and MNP are straight lines. $MR = OP$ and $\angle RMN = 21^\circ$. Find

(a) $\angle ORQ$

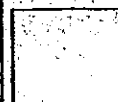
(b) $\angle OPQ$



Do not write in this space

Ans. (a) _____ [1]

(b) _____ [3]



- 15 Car A and Car B travelled between Cape Town and Maxi Town. Car A took 8 hours to travel from Cape Town to Maxi Town while Car B took 10 hours to travel from Maxi Town to Cape Town. Both Car A and Car B left for their destination at the same time. After travelling for $4\frac{1}{3}$ hours, Car A stopped at a petrol kiosk. How long would Car B take to pass this petrol kiosk?

Do not write in this space

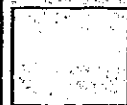
Ans:

[4]

- 16 Brendan has some blue and green marbles in the ratio of 2 : 5. The next day, he bought 18 more blue marbles and gave 6 green marbles to his sister. The ratio of the number of blue marbles to the number of green marbles became 5 : 4. How many marbles did Brendan have at first?

Do not write in
this space

Ans: _____ [4]



- 17 Ted had \$300 less than Amy. Amy decided to give $\frac{1}{5}$ of her money to Ted. In return, Ted gave $\frac{1}{3}$ of his money back to Amy. Amy now has \$400 more than Ted. How much money did Ted have at first?

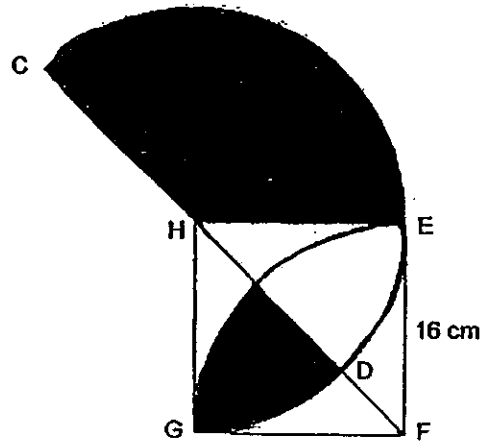
Do not write in
this space

Ans: _____ [5]



- 18 The figure is made up of a semi-circle, a square and two quadrants. H is the centre of the semi-circle. EFGH is a square with sides 16 cm and CF is a straight line. Find the shaded area, rounding off to 1 decimal place. (Use the calculator value of π)

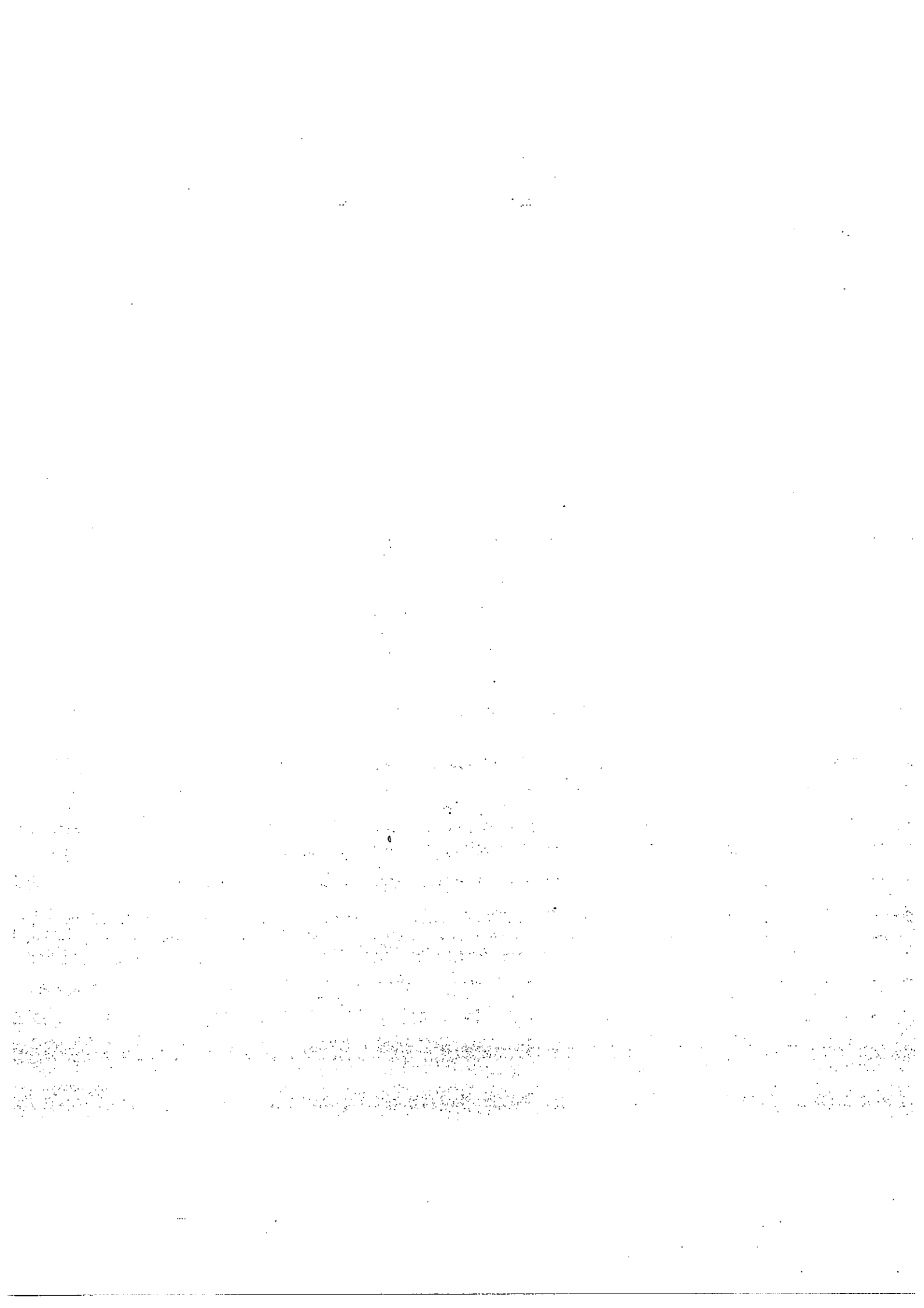
Do not write in this space

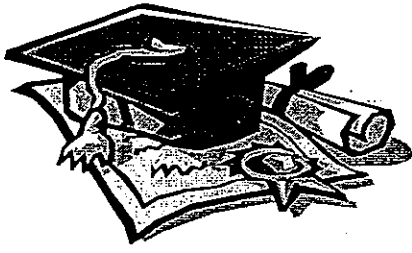


Ans: _____ [5]



END OF PAPER
CHECK YOUR WORK CAREFULLY!





ANSWER SHEET

EXAM PAPER 2013

SCHOOL : AITONG

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
1	2	2	3	1	4	2	3	1	3	4	2	1	3	1

16)130000

17)6/7

18)0.1

19)25

20)F

21)108

22)6R draw 400

23)\$54

24)0.004

25)(8r+7)

26)87

27)30

28)11/18

29)39

30)\$30

Paper 2

1) $165 \times 11 = 1815$

$248 \times 12 = 2976$

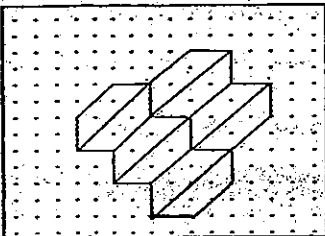
$2976 - 1815 = 1161$

2) $180^\circ - 30^\circ = 150^\circ$

3) $\frac{1}{4} \times 3.14 \times 10 = 7.85$

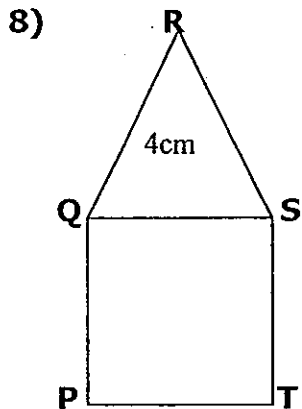
4)27:35

5)



6) $45 \div 3 = 15$
 $15 \times 7 = 105$
 $105 \div 5 = 21$
 $21 \times 8 = \$168$

7) $8 \div 4 = 2$
 $6 + 15 + 21 = 42$
 $42 \times 2 = 84$



9) a) $6 + 2 + 2 = 10$
 b) $86 - 2 = 84$
 $84 \div 2 = 42$ (B)
 $42 \div 2 = \text{Pattern } 21$

10) $56\text{cm} \div 4 = 14\text{cm}$
 $14\text{cm} \times 14\text{cm} = 196\text{cm}^2$
 $196\text{cm}^2 \div 2 = 98\text{cm}^2$
 $98\text{cm}^2 \times 24 = 2352\text{cm}^2$

11) K \rightarrow 70% E \rightarrow 100%

$10/100 \times 70 = 7$

After

K \rightarrow 70% + 7% = 77%

E \rightarrow 75%

77% - 75% = 2%

2% \rightarrow 900

1% \rightarrow 450

77% \rightarrow 450 \times 77 = \$34650

$$12) 25 \times 1.4 = 35$$
$$35 + 4 = 39 \text{ (25 boxes)}$$

$$964 \div 39 \approx 24$$

$$24 \times 39 = 936$$

$$964 - 936 = 28$$

$$28 \div 1.4 = 20$$

$$24 \times 25 = 600$$

$$600 + 20 = 620 \text{ boxes.}$$

$$13) 186 - 42 = 144$$

$$144 \div 2 = 72$$

Total cost of NB \rightarrow 72

Total cost of SB \rightarrow $186 - 72 = 114$

No. of NB $\square\square\square$

No. of SB \square

3u of SB \rightarrow 114

$$114 - 24 = 90$$

$$90 \div 9 = 10$$

$$24 \div 10 = \$2.40$$

$$14) a) \angle ORG = 21^\circ + 21^\circ = 42^\circ$$

$$b) \angle ORG = \angle RQO$$

$$\angle RQO = 180^\circ - 42^\circ - 42^\circ = 96^\circ$$

$$\angle QOP = 180^\circ - 96^\circ - 21^\circ = 63^\circ$$

$$\angle OPQ = (180^\circ - 63^\circ) \div 2 = 58.5^\circ$$

$$15) \quad A : B$$

$$\text{Time } 8 : 10$$

$$4 : 5$$

$$\text{Speed } 5 : 4$$

$$8 \times 5 = 40$$

$$\text{In } 4\frac{1}{3}\text{h} \rightarrow 4\frac{1}{3} \times 5 = 21\frac{2}{3}$$

$$40 - 21\frac{2}{3} = 18\frac{1}{3}$$

$$\text{Time} = 18\frac{1}{3} \div 4 = 4\frac{7}{12}\text{h}$$

$$\begin{aligned}16) 25 - 8 &= 17 \\ 72 + 30 &= 102 \\ 102 \div 17 &= 6 \\ 2 + 5 &= 7 \\ 6 \times 7 &= 42\end{aligned}$$

$$\begin{aligned}17) \text{Ted} &\rightarrow 15u \\ \text{Amy} &\rightarrow 15u + 300 \\ \frac{1}{5} \times 15u &= 3u \\ \frac{1}{5} \times 300 &= 60\end{aligned}$$

$$\begin{aligned}\text{Ted} &\rightarrow 18u + 60 \\ \text{Amy} &\rightarrow 12u + 240 \\ \frac{1}{3} \times 18u &= 6u \\ \frac{1}{3} \times 60 &= 20\end{aligned}$$

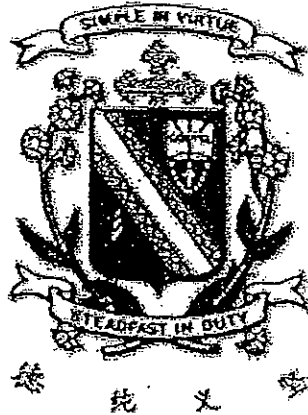
$$\begin{aligned}\text{Ted} &\rightarrow 12u + 40 \\ \text{Amy} &\rightarrow 18u + 260 \\ 18u + 260 + 2u - 40 &\rightarrow 400 \\ 6u + 220 &\rightarrow 400 \\ 6u &\rightarrow 180 \\ 1u &\rightarrow 30 \\ 15u &\rightarrow 30 \times 15 = \$450\end{aligned}$$

$$\begin{aligned}18) 16 \times 16 &= 256 \\ \frac{1}{4} \times \pi \times 16 \times 16 &\approx 201.06 \\ 256 - 201.06 &= 54.94 \\ 256 - 54.94 - 54.94 &= 146.12 \\ 146.12 \div 2 &= 73.06(A) \\ 54.94 \div 2 &= 27.47\textcircled{C} \\ \frac{1}{2} \times \pi \times 16 \times 16 &\approx 402.12 \\ 402.12 - 27.47 &= 374.65 \\ \text{ANS: } &374.7\text{cm}^2\end{aligned}$$

Name : _____ ()

Class : Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics

2013 Semestral Assessment One

Paper 1

Booklet A

13 May 2013

15 QUESTIONS
20 MARKS

TOTAL TIME FOR BOOKLETS A AND B: 50 MINUTES

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

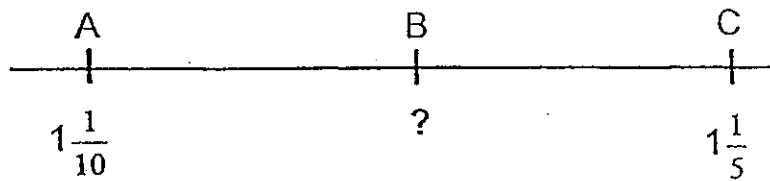
Answer all questions.

The use of calculators is NOT allowed.

This booklet consists of 7 printed pages including the cover page.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3, 4) on the Optical Answer Sheet (OAS).
[20 marks]

1. In the number line below, $AB = BC$. What is the value of B?



- (1) 1.05
(2) 1.10
(3) 1.15
(4) 1.30
2. Bill bought 2 l of orange juice. Then he spilled 50 cm^3 of it. What percentage of the orange juice did he spill?

- (1) 2.5%
(2) 25%
(3) 40%
(4) 97.5%

3. There are 30 teachers in a hall. There are 120 more pupils than teachers. What is the ratio of the number of teachers to the total number of people in the hall?

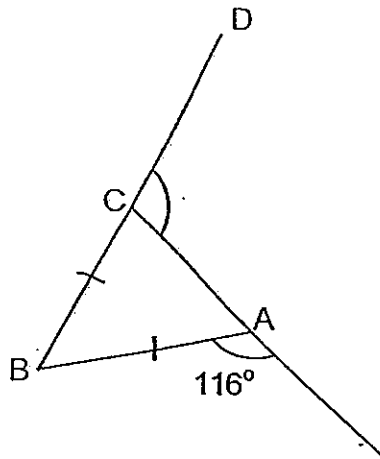
(1) 1 : 3

(2) 1 : 4

(3) 1 : 5

(4) 1 : 6

4. The figure below is not drawn to scale. Given that $AB = BC$ and BD is a straight line, find $\angle ACD$.



(1) 52°

(2) 64°

(3) 116°

(4) 128°

5. Simplify $5n + 4 - n + 24 \div 4$.

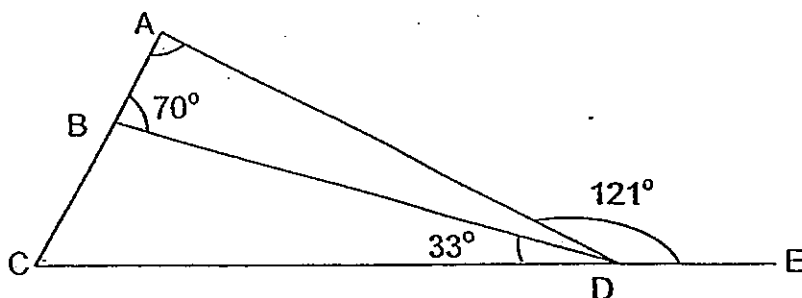
- (1) $4n + 7$
- (2) $4n + 10$
- (3) $6n + 7$
- (4) $6n + 10$

6. The amount of money that Joe has to the amount of money that Ken has is $9 : 7$. After Joe has spent \$2.80, he has \$1.70 more than Ken. How much money does Ken have?

- (1) \$2.25
- (2) \$4.50
- (3) \$15.75
- (4) \$20.25

(3)

7. The figure below is not drawn to scale. CDE is a straight line. Find $\angle CAD$.



- (1) 26°
- (2) 51°
- (3) 59°
- (4) 84°

8. Wai Peng spent $\frac{1}{6}$ of his money on transport and $\frac{2}{3}$ of the remainder on food. What fraction of his money did he have left?

(1) $\frac{13}{18}$

(2) $\frac{5}{18}$

(3) $\frac{5}{9}$

(4) $\frac{1}{6}$

9. A piece of wire was used to construct the outline of a cuboid 15 cm by 11 cm by 30 cm. What was the total length of wire used for the cuboid?

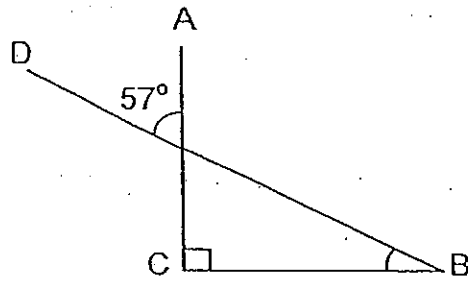
(1) 56 cm

(2) 112 cm

(3) 224 cm

(4) 448 cm

10. The figure is not drawn to scale. AC and DB are straight lines. Find $\angle DBC$.



- (1) 33°
- (2) 37°
- (3) 43°
- (4) 47°

11. 10 cones are placed at equal distances apart in a straight line. The first cone is 180 m apart from the last cone. How far is it between the 4th and the 6th cone?

- (1) 60 m
- (2) 40 m
- (3) 36 m
- (4) 20 m

12. The average of five numbers is 13. When one of the numbers is changed to 7, the average of the five numbers becomes 12.2. What is the original number before it is changed to 7?

- (1) 3
- (2) 7.8
- (3) 11
- (4) 19.6

13. Ali has $3r$ marbles. Ben has 6 more marbles than Ali and 2 fewer marbles than Cain. How many marbles do Ali and Cain have altogether?

(1) $6r + 8$

(2) $6r + 4$

(3) $3r + 6$

(4) $3r + 4$

14. Remus had \$140 and he wanted to buy some glasses at \$3.50 each. Then he changed his mind and bought cheaper ones at \$2.80 each. How many more glasses could he buy with the \$140?

(1) 200

(2) 160

(3) 20

(4) 10

15. Mr Sng sold three machines, X, Y and Z, for a total of \$770 000. He sold Machine X at 50% of the price of Machine Y. Then he sold Machine Z at $\frac{1}{3}$ the price of Machine X. At what price did Mr Sng sell Machine X?

(1) \$210 000

(2) \$231 000

(3) \$330 000

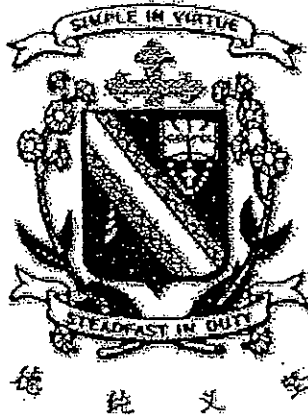
(4) \$420 000

End of Booklet A

Name : _____ ()

Class : Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics

2013 Semestral Assessment One

Paper 1

Booklet B

13 May 2013

Booklet A	/ 20
Booklet B	/ 20
Total	/ 40

15 QUESTIONS
20 MARKS

TOTAL TIME FOR BOOKLETS A AND B: 50 MINUTES

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

The use of calculators is NOT allowed.

This booklet consists of 8 printed pages including the cover page.

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided
For questions which require units, give your answers in the units stated. [10 marks]

Do not
write in
this space

16. The area of each face of a cube is 81 cm^2 . What is the volume of the cube?

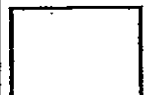
Ans : _____ cm^3

17. Gopal has 84ℓ of paint. $\frac{3}{4} \ell$ of paint is needed to paint a bench completely.
How many benches can he paint completely?

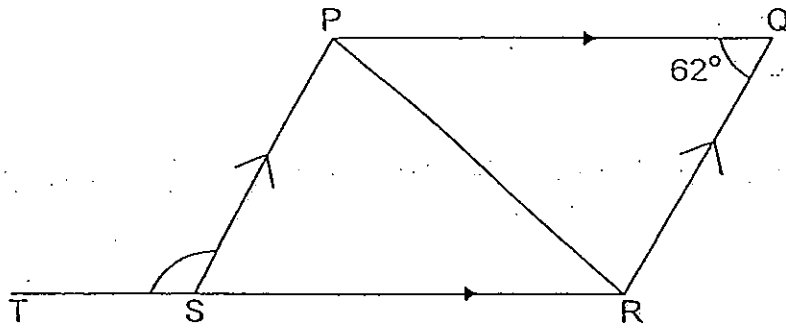
Ans : _____

18. To bake a loaf of bread, Mrs Toh mixes 9 cups of flour with every 4 cups of
water. If she uses 24 cups of water, how many cups of flour does she need?

Ans : _____



19. In the figure, PQRS is a parallelogram and TSR is a straight line. Find $\angle PST$.



Do not write in this space

Ans : _____^o

20. In Goodwages Factory, 25 workers were on medical leave in June. In July, 20 workers were on medical leave. What was the percentage decrease in the number of workers who were on medical leave from June to July?

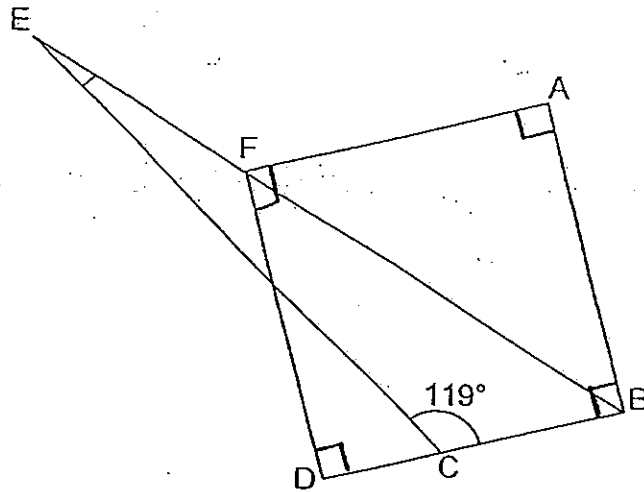
Ans : _____%

21. A piece of string is cut into 3 pieces in the ratio 9 : 5 : 2. The longest piece is 28 cm longer than the shortest piece. Find the length of the original piece of string.

Ans : _____ cm



22. The figure is not drawn to scale. ABDF is a square. EB and EC are straight lines. Find $\angle CEB$.



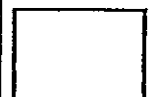
Ans : _____^o

23. The table shows the parking fees for a carpark.

First hour	\$1.30
Every additional 15 minutes or part thereof	\$0.50

Mohan parked his car for $3\frac{5}{12}$ h. How much parking fees did he pay?

Ans : \$ _____

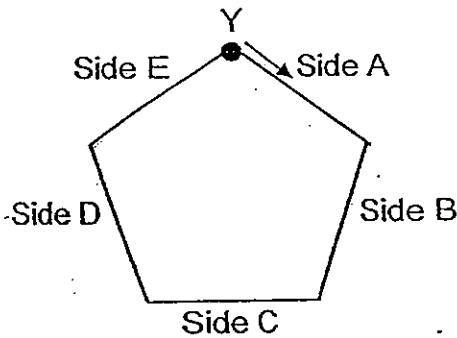


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24. There were 400 more pupils in Eminent Primary School than in Glorious Primary School. When 26 pupils in Glorious Primary School left the school, both schools had 2004 pupils altogether. How many pupils were there in Glorious Primary School at first?

Ans : _____

25. A snail started crawling along a pentagon of equal sides from the point marked Y in the direction shown. On which side will the snail be when it has crawled $\frac{13}{20}$ of the distance around the pentagon?



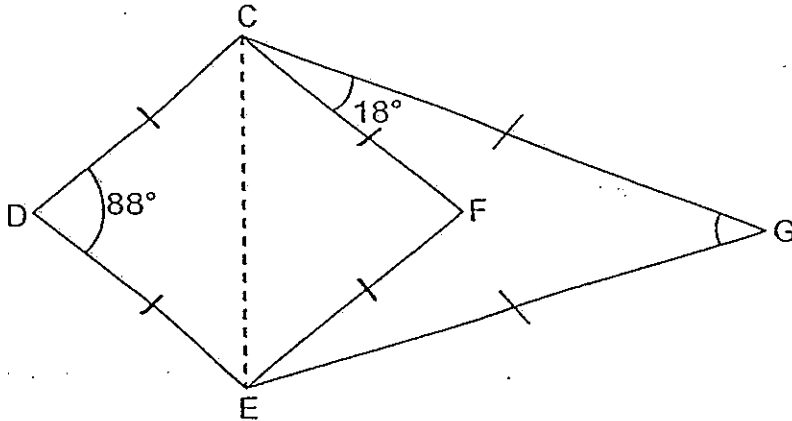
Ans : _____



Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. [10 marks]

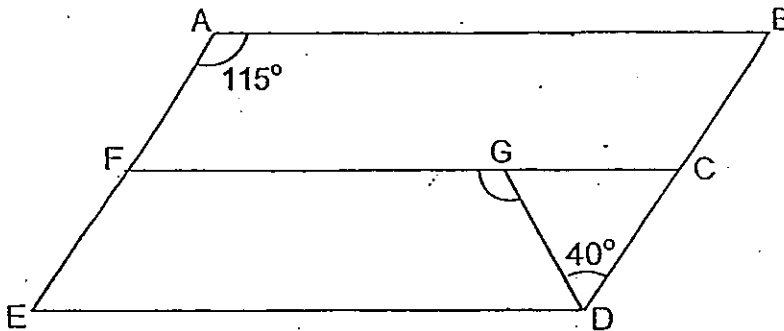
Do not write in this space

26. The figure is not drawn to scale. CDEF is a rhombus and CEG is an isosceles triangle. Find $\angle CGE$.

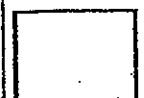


Ans : _____ °

27. In the figure, ABDE is a parallelogram. $AB \parallel FC$ and $FC \parallel ED$. Find $\angle FGD$.



Ans : _____ °



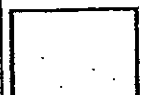
28. 1 kg of grapes cost as much as 2 kg of apples. Fion spent \$36 on 4 kg of grapes and 4 kg of apples. What was the cost of 4 kg of apples?

Do not
write in
this
space

Ans : \$ _____

29. Dolores needs 17 cans of peaches to prepare for a party. 1 can of peaches costs \$2. For every 4 cans of peaches, she will receive 1 can of peaches free. What is the minimum amount of money that Dolores has to pay?

Ans : \$ _____



30. The ratio of the number of men to the number of women at a cafe was 2 : 3. After some time, 60 more men came and 30 women left. In the end, there were 20 more women than men at the cafe. Find the number of women at the cafe in the end.

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space

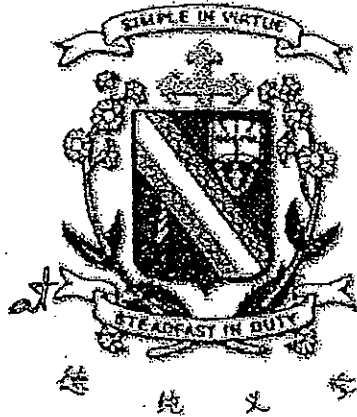
Ans : _____

End of Paper 1

Name : _____ ()

Class : Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics

2013 Semestral Assessment One

Paper 2

13 May 2013

Paper 1	40
Paper 2	60
Total	100

Parent's Signature

**18 QUESTIONS
60 MARKS**

TOTAL TIME FOR PAPER 2: 1 HOUR 40 MINUTES

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

The use of an approved calculator is expected, where appropriate.

This booklet consists of 17 printed pages including the cover page.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

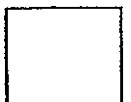
Do not write in this space.

1. Lucille and Kyrena shared 52 toffees. Kyrena had the larger share. When each of them gave away half of her original share, Kyrena had 12 more toffees than Lucille. How many toffees did Kyrena have at first?

Ans: _____ [2]

2. The average mass of 3 women and 9 men is 73 kg. The average mass of all the men is 68 kg. What is the average mass of all the women?

Ans: _____ kg [2]



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write in this
space.

3. In a farm, $\frac{3}{10}$ of the animals are goats. $\frac{2}{7}$ of the remaining animals are cows. The rest of the animals are pigs. There are 8 060 more pigs than goats. Find the total number of animals in the farm.

Ans: _____ [2]

4. Gonan wanted to buy 8 notebooks of the same type but found that he was short of \$0.90. If he were to buy 5 such notebooks, he would have \$3.60 left. How much money did Gonan have?

Ans: \$ _____ [2]



5. Aizza had 145 kg of meat. 25% of it was mutton and the rest was chicken. Later, she bought some more mutton. In the end, 80% of the meat that she had was mutton. How much mutton did Aizza buy?

Do not write in this space

Ans: _____ kg [2]

For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

Do not write in this space.

6. At a funfair, Maeve received a total amount of \$5334 from selling lollipops at 60¢ each, 45¢ each and \$1.50 each. She sold 340 more lollipops at 60¢ each than at \$1.50 each. Given that she received \$2700 from selling the lollipops at \$1.50 each, how many lollipops did she sell altogether?

Ans: _____ [4]

7. Calix and Brooklyn each had some savings. They wanted to buy a water-bottle of the same cost. Calix was short of \$22 and Brooklyn was short of \$3. When they combined their savings, they still did not have enough money to buy one water-bottle. What is the greatest possible cost of the water-bottle? (Note : the cost of the water-bottle is a whole number)

Do not
write in
this
space.

Ans: _____ [4]



8. During a sale, the discounted price of a bottle of perfume was $\frac{10}{13}$ of its usual price. Sheridan bought 4 such bottles during the sale and saved a total of \$234. What was the usual price of one such bottle of perfume?

Do not write in this space.

Ans: _____ [3]



9. Jotham gave Webster 38% of his car magazines and had 31 car magazines left. As a result, Webster's collection of car magazines increased by 76%. How many car magazines did Webster have before he received from Jotham?

Do not write in this space.

Ans: _____ [3]

10. Mrs Jung saved 28% of her salary in January. In February, her salary was reduced by 20% but she still saved the same amount of \$1351.
- (a) What was her salary in February?
 - (b) What percentage of her salary in February did she save?

Ans: (a) _____ [2]

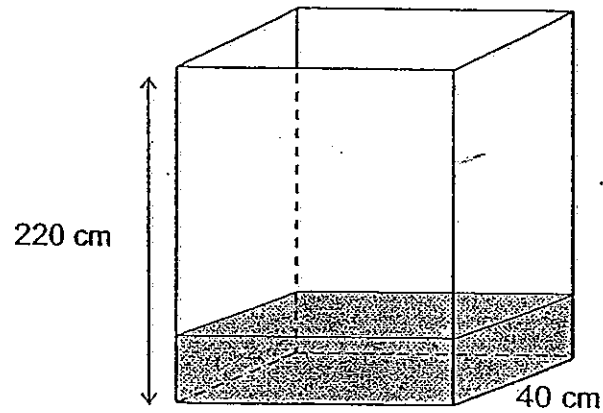
(b) _____ [2]

11. The rectangular tank shown below was 16% filled with water. The water in the tank was poured into another cubical tank of edge 44 cm. The cubical tank was filled up completely.

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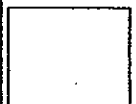
(a) What is the capacity of the rectangular tank?

(b) What is the length of the rectangular tank?



Ans: (a) _____ [2]

(b) _____ [1]



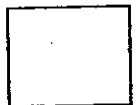
12. 46% of the books in a library are English books. The rest are Chinese and Malay books. The number of Chinese books is 5 times of the number of Malay books.

Do not write in this space.

- (a) Express the number of English books as a fraction of the number of Malay books.
- (b) Given that there are 1443 more English books than Malay books, how many more Malay books are to be added to the library so that there are as many Chinese books as Malay books?

Ans: (a) _____ [1]

(b) _____ [3]



13. John and Mark collect marbles. The ratio of the number of marbles John collects to the number of marbles Mark collects is $5 : 7$. If John gives Mark 141 marbles, the ratio of the number of John's marbles to the number of Mark's marbles will become $1 : 5$. Find the total number of marbles the boys have.

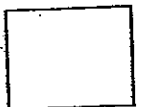
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space.

Ans: _____ [3]

14. Two taps, X and Y, were turned on at the same time to fill a tank 109 cm by 50 cm by 100 cm. The tank had a plug which was attached to the bottom. Water from the two taps flowed into the tank at $2.2\ell/\text{min}$ and $1.7\ell/\text{min}$ respectively. After 14 minutes, the plug was opened, with the two taps still turned on. Given that the water flowed out of the plug at $300\text{ ml}/\text{min}$, what is the water level 3 minutes after the plug was removed?

Do not write in this space.

Ans: _____ [5]



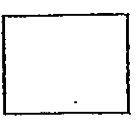
15. A tray of sweets was shared equally among 8 children. 3 children gave up 50% of what they could receive. After that, each of the remaining children received 12 more sweets.

Do not write in this space.

- (a) How many sweets did each of the 3 children give up?
- (b) How many sweets were there in the tray at first?

Ans: (a) _____ [2]

(b) _____ [1]



16. A box contained some sketch books and diaries. The number of sketch books was twice of the number of diaries. Each time, 3 sketch books and 5 diaries were removed from the box. After some time, only 56 sketch books were left in the box.

Do not write in this space.

- (a) How many diaries were removed from the box?
(b) What was the total number of sketch books and diaries in the box originally?

Ans: (a) _____ [4]

(b) _____ [1]



17. A club had adults and children in the ratio 3 : 2. After 10 adults and 80 children joined the club, the ratio of the number of the adults to the number of children became 1 : 2.

(a) How many members were there in the club at first?

(b) How many children were there in the end?

Do not
write in
this
space.

Ans: (a) _____ [2]

(b) _____ [2]

18. Dion, Ellen and Fred shared a sum of money. Dion's share was 50% of Ellen's share and Ellen's share was 75% of Fred's share. Ellen then gave

Fred \$950.50 and this was $\frac{1}{5}$ of what Fred had in the end.

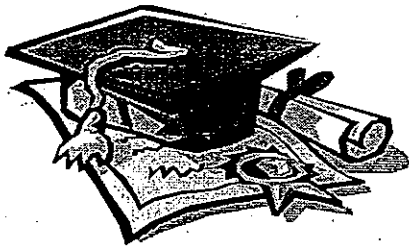
- (a) Express Fred's original share as a percentage of the total amount of money shared among the 3 friends. Leave your answer correct to 1 decimal place.
- (b) Find the total sum of money that was shared among the 3 friends.

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write in
this
space.

Ans: (a) _____ [1]

(b) _____ [4]

End of Paper 2



ANSWER SHEET

EXAM PAPER 2013

SCHOOL : CHIJ

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
3	1	4	3	2	3	4	2	3	1	2	3	1	4	2

$$16) \sqrt{81} = 9$$

$$9 \times 9 \times 9 = 729 \text{cm}^3$$

$$17) 84 \div \frac{3}{4} = 84 \times \frac{4}{3}$$
$$= 28 \times 4 = 112$$

$$18) 24 \div 4 = 6$$
$$6 \times 9 = 54$$

$$19) 180^\circ - 62^\circ = 118^\circ$$

$$20) 25 - 20 = 5$$
$$\frac{5}{20} \times 100\% = 20\%$$

$$21) 9u - 2u = 7u \rightarrow 28$$
$$1u \rightarrow 4$$
$$9u + 2u + 5u = 16u$$
$$16u \rightarrow 4 \times 16 = 64 \text{cm}$$

$$22) 90^\circ \div 2 = 45^\circ$$

$$180^\circ - 119^\circ - 45^\circ = 16^\circ$$

$$23) 5/12 \text{h} \rightarrow 25 \text{min}$$

$$1^{\text{st}} \text{ hour} \rightarrow \$1.30$$

$$2^{\text{nd}} \text{ hour} \rightarrow \$0.50 \times (60 \div 15) = \$2$$

$$3^{\text{rd}} \text{ hour} \rightarrow \$2$$

$$25 \text{min} \rightarrow \$0.50 \times 2 = \$1$$

$$\$1 + \$2 + \$2 + \$1.30 = \$6.30$$

$$24) 2004 + 26 = 2030$$

$$2030 - 400 = 1630$$

$$1630 \div 2 = 815$$

$$25) 20 \div 5 = 4$$

$$13 \div 4 = 3\frac{1}{4}$$

$$A \rightarrow B \rightarrow C \rightarrow D$$

side D

$$26) 180^\circ - 88^\circ = 92^\circ$$

$$92^\circ \div 2 = 46^\circ$$

$$46^\circ + 18^\circ = 64^\circ$$

$$180^\circ - 64^\circ - 64^\circ = 52^\circ$$

$$27) 115^\circ - 40^\circ = 75^\circ$$

$$180^\circ - 75^\circ = 105^\circ$$

$$28) 1G = 2A \times 4$$

$$4G = 8A$$

$$29) 5 \text{ cans} \rightarrow \$2 \times 4 = \$8$$

$$15 \text{ cans} \rightarrow \$8 \times (15 \div 5) = \$24$$

$$\$24 + (\$2 \times 2) = \$28$$

$$8u + 4u = 12u$$

$$\$36 \div 12 = \$3$$

$$\$3 \times 4 = \$12$$

$$30) 2u + 60 = 1p$$

$$3u - 30 = 1p + 20$$

$$3u = 1p + 50$$

$$2u = 1p - 60$$

$$1u \rightarrow 110$$

$$3u \rightarrow 110 \times 3 = 330$$

$$330 - 30 = 300$$

Paper 2

$$1) (52 - 12 - 12) \div 4 = 7$$

$$(7 \times 2) + 12 + 12 = 38$$

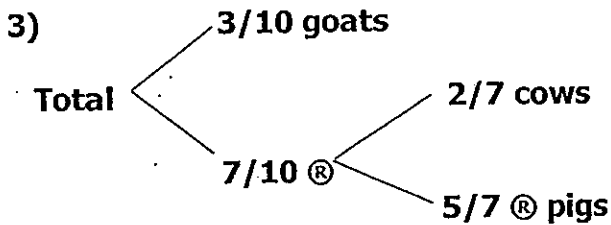
Kyrena had 38 toffees at first.

$$2) 73 \times (9 + 3) = 876$$

$$68 \times 9 = 612$$

$$(876 - 612) \div 3 = 88$$

The average mass of all the women is 88kg.



$$5/7 \times 7/10 = 5/10$$

$$5/10 - 3/10 = 2/10 \rightarrow 8060$$

$$(8060 \div 2) \times 10 = 40300$$

The total number of animals is 40300

4) $8N - \$0.90 = 5N + \3.60
 $3N \rightarrow \$4.50$
 $1N \rightarrow \$1.50$
 $(\$1.50 \times 5) + \$3.60 = \$11.10$
 Gonan had \$11.10

5) $\frac{1}{4} \times 145 = 36.25 (M)$
 $145 - 36.25 = 108.75 \text{ ©}$
 $(108.75 \times 4) - 36.25 = 398.75$
 Aizza bought 398.75kg of Mutton.

6) $2700 \div 1.5 = 1800 (\$1.50)$
 $1800 + 340 = 2140 (60c)$
 $\$2700 + (2140 \times \$0.60) = \$3984$
 $\$5334 - \$3984 = \$1350$
 $\$1350 \div \$0.45 = 3000 (\$0.45)$
 $1800 + 2140 + 3000 = 6940$
 She sold 6940 lollipops altogether.

7) cost of water bottle	check	
\$23	$(\$23 - \$22) + (\$23 - \$3) = \$21$	✓ / X
\$24	$(\$24 - \$22) + (\$24 - \$3) = \$23$	✓
\$25	$(\$25 - \$22) + (\$25 - \$3) = \$25$	✓ / ✓
The greatest possible cost of the water bottle is \$24		X

8) $10u \times 4 = 40u$
 $13u \times 4 = 52u$
 $52u - 40u = 12u \rightarrow 234$
 $1u \rightarrow 19.5$
 $13u \rightarrow 253.5$
 The usual price of one such bottle of perfume is \$253.50

9) $50u - 19u = 31u \rightarrow 31$
 $1u \rightarrow 1$
 $19u \rightarrow 19$
 $76\% \rightarrow 19$
 $100\% \rightarrow 19/76 \times 100 = 25$
 Webster had 25 car magazines before he received from Jotham.

10) a) $(\$1351 \div 28) \times 80 = \3860
 Her salary in February was \$3860
 b) $(\$1351 \div \$3860) \times 100\% = 35\%$
 She saved 35% of her salary in February

11)a) $44 \times 44 \times 44 = 85184$

$(85184 \div 16) \times 100 = 532400$

The capacity of the rectangular tank was 532400cm³

b) $532400 \div (220 \times 40) = 60.5$

The length of the rectangular tank was 60.5cm

12)a) $23u \rightarrow \text{Eng}$

$50u - 23u = 27u \rightarrow \text{Chinese} + \text{Malay}$

$27u \div 6 = 4.5u$

$\text{Eng/Malay} = 23/4.5$

$= 46/9$

The fraction is 46/9

b) $46u - 9u = 37u \rightarrow 1443$

$1u \rightarrow 39$

$46u \rightarrow 39 \times 46 = 1794$ (Eng)

$9u \rightarrow 39 \times 9 = 351$ (Malay)

$351 \times 5 = 1755$ (Chinese)

$1755 - 351 = 1404$

1404 Malay books are to be added to the library.

13) $5u - 2u = 3u \rightarrow 141$

$1u \rightarrow 47$

$12u \rightarrow 564$

The total number of marbles the boys have is 564

14) $109 \times 50 \times 100 = 545000$

$(2.2L + 1.7L) \times 14 = 54.6L$

$(2.2L + 1.7L) \times 3 = 11.7L$

$300\text{ml} \rightarrow 0.3L$

$11.7L - (0.3L \times 3) = 10.8L$

$54.6L + 10.8L = 65.4L$

$65.4L \rightarrow 65400\text{cm}^2$

$65400 \div 109 \div 50 = 12$

The water level is 12cm 3min after the plug was removed.

15)a) $8 - 3 = 5$

$5 \times 12 = 60$

$60 \div 3 = 20$

Each of the 3 children gave up 20 sweets.

b) $20 \times 2 = 40$

$40 \times 8 = 320$

There were 320 sweets in the tray at first.

$$16)a) 5X = 3X + 56/2 \times 2$$

$$10X = 3X + 56$$

$$7X \rightarrow 56$$

$$X = 8$$

$$8 \times 5 = 40$$

40 diaries were removed from the box.

$$b) 8 \times 3 = 24$$

$$24 + 56 = 80$$

$$80 + (80 \div 2) = 120$$

The total number of sketch books and diaries in the box original is 120.

$$17)a) A : C$$

$$3 : 2$$

$$\begin{array}{r} +10 \quad +80 \\ \hline \end{array}$$

$$1P : 2P$$

$$A : C$$

$$6 : 2$$

$$\begin{array}{r} +20 \quad +80 \\ \hline \end{array}$$

$$2P : 2P$$

$$6u + 20 = 2u + 80$$

$$4u \rightarrow 60$$

$$1u \rightarrow 15$$

$$3u + 2u = 5u$$

$$15 \times 5 = 75$$

There were 75 members at first.

$$b) (15 \times 2) + 80 = 110$$

There are 110 children in the end.

$$18) D : E$$

$$E : F$$

$$1 : 2 \times 3$$

$$3 : 4 \times 2$$

$$3 : 6$$

$$6 : 8$$

$$D : E : F : T$$

$$3 : 6 : 8 : 17$$

$$a) (3802 \div 8079.25) \times 100\% \approx 47.1\%$$

Fred's original share was 47.1% of the total amount of money shared among the 3 friends.

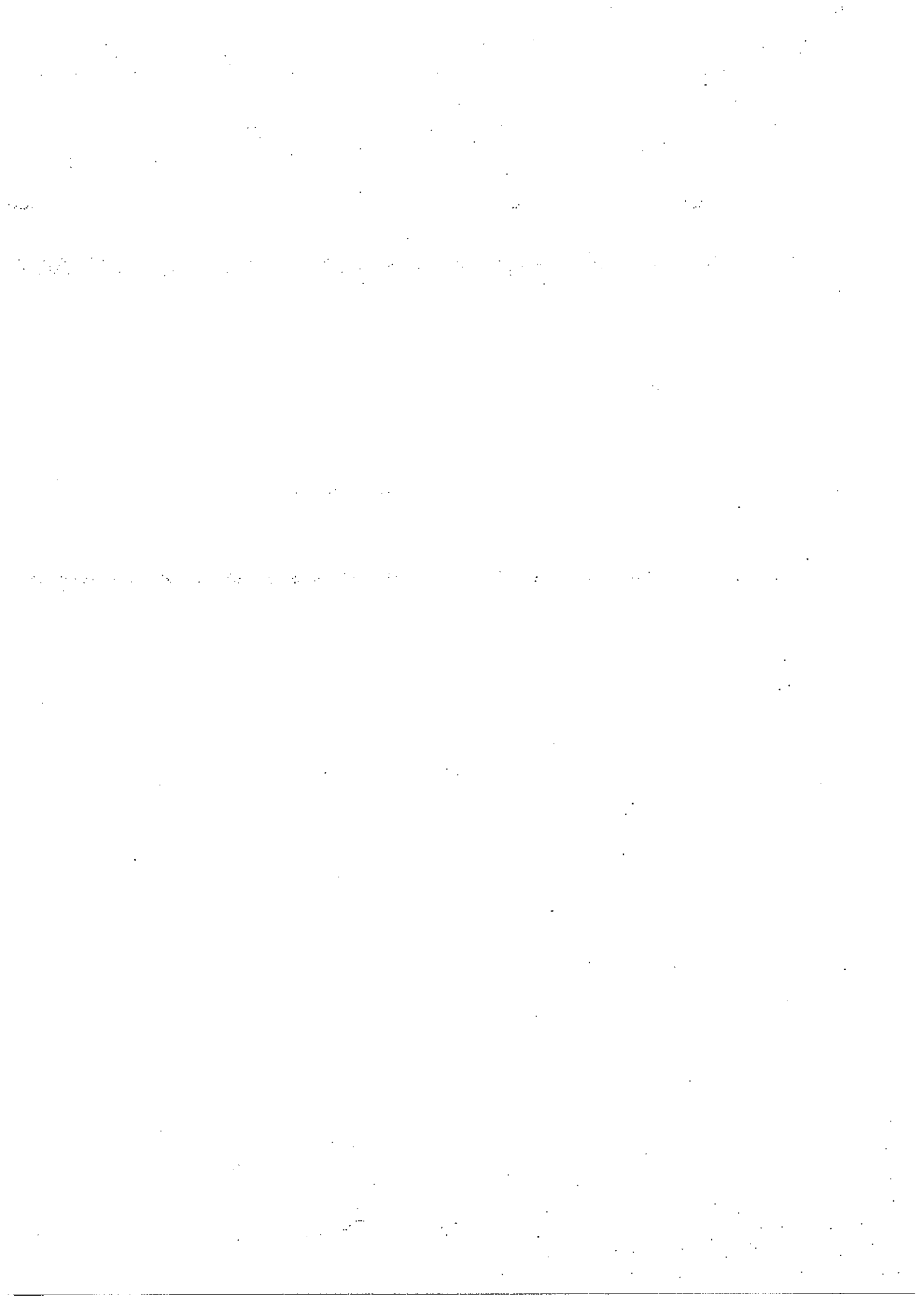
$$b) \$950.50 \times 5 = \$4752.50 \text{ (F in the end)}$$

$$(\$4752.50 - \$950.50) \div 8 = \$475.25$$

$$\$475.25 \times 8 = \$3802$$

$$\$475.25 \times 17 = \$8079.25$$

The total sum was \$8079.25.



METHODIST GIRLS' SCHOOL

Founded in 1887



MID-YEAR EXAMINATION 2013 PRIMARY.6 MATHEMATICS

PAPER 1 (BOOKLET A)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

The use of calculators is NOT allowed.

Name: _____ ()

Class: Primary 6. _____

Date: 14 May 2013

This booklet consists of 6 printed pages including this page.

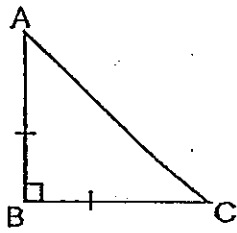
Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

- 1 Jane had $\$5x$. Her mother gave her $\$3x$. She bought a storybook for $\$10$. How much money had she left?

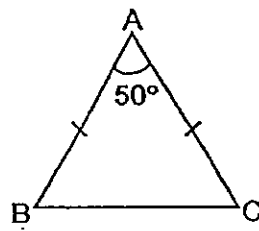
- (1) $\$8x$
 (2) $\$(2x - 10)$
 (3) $\$(10 - 8x)$
 (4) $\$(8x - 10)$

- 2 Which of the following is an equilateral triangle?

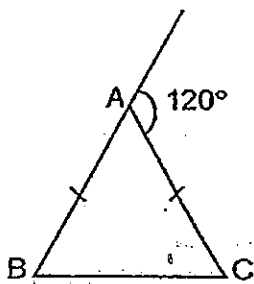
(1)



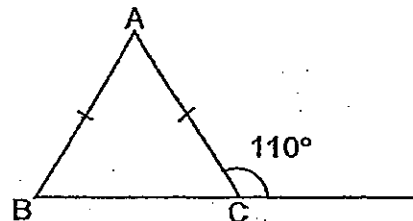
(2)



(3)



(4)

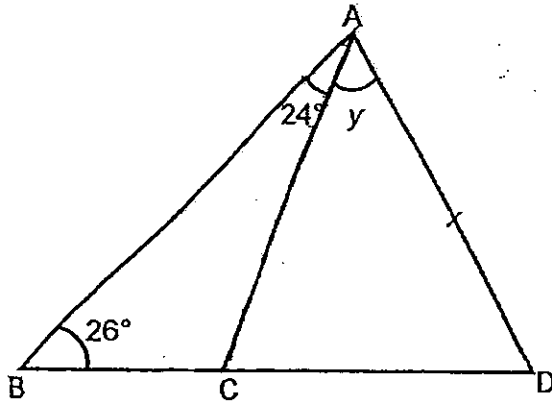


- 3 The usual price of a bicycle is $\$200$. Mr Lee bought it at $\$160$. What was the percentage discount?

- (1) 20%
 (2) 25%
 (3) 40%
 (4) 80%

(Go on to the next page)

- 4 In the figure, ACD is an isosceles triangle and BCD is a straight line. Find $\angle y$.



- (1) 50°
 (2) 80°
 (3) 100°
 (4) 130°
- 5 Which one of the following is equal to 20 sixths?

- (1) $\frac{3}{10}$
 (2) $3\frac{1}{3}$
 (3) $6\frac{1}{20}$
 (4) $20\frac{1}{6}$

- 6 If $X:Z = 5:2$ and $Y:Z = 3:4$, what is the ratio of $X:Y$?

- (1) $5:3$
 (2) $10:3$
 (3) $15:6$
 (4) $15:8$

(Go on to the next page)

7 There are 75 passengers in a bus. 36% of them are children and the rest are adults. If 75% of the adults are men, how many women are there in the bus?

- (1) 12
- (2) 24
- (3) 36
- (4) 48

8 Find the area of a semicircle of diameter 12 cm in terms of π .

- (1) $18 \pi \text{ cm}^2$
- (2) $36 \pi \text{ cm}^2$
- (3) $72 \pi \text{ cm}^2$
- (4) $144 \pi \text{ cm}^2$

9 Six thousands, 5 hundreds and 14 tenths is _____.

- (1) 6514
- (2) 6640
- (3) 6501.4
- (4) 6500.14

10 A number when rounded off to the nearest thousand is 400 000.
What is that number?

- (1) 390 994
- (2) 399 573
- (3) 400 900
- (4) 409 985

(Go on to the next page)

- 11 Samantha spends $\frac{3}{5}$ of her monthly allowance on food. She spends 0.2 of the remainder on transport and saves the rest. What fraction of her monthly allowance does she spend in all?

- (1) $\frac{2}{5}$
(2) $\frac{4}{5}$
(3) $\frac{8}{25}$
(4) $\frac{17}{25}$

- 12 Amanda baked 189 cookies. She divided them in the ratio 2 : 3 : 4. She kept the largest share and gave the rest to her cousins. How many cookies did her cousins receive in all?

- (1) 42
(2) 63
(3) 84
(4) 105

- 13 Mr Tan gave 20% of his monthly salary to his wife. He spent 45% of his salary and saved the rest. If his wife received \$600 less than what he saved, what was his monthly salary?

- (1) \$2400
(2) \$4000
(3) \$3000
(4) \$6000

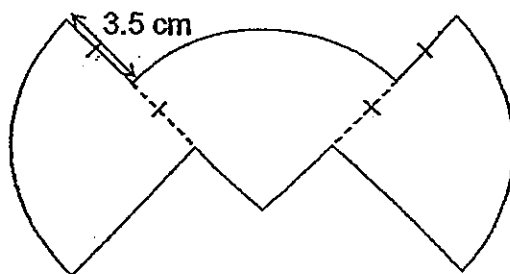
(Go on to the next page)

- 14 The distance between Town A and Town B is 580 km. Mr Raja travelled from Town A to Town B at an average speed of 72 km/h for $2\frac{1}{2}$ h.
How many kilometres more must Mr Raja travel to reach Town B?

- (1) 180 km
- (2) 400 km
- (3) 436 km
- (4) 508 km

- 15 The following figure is made up of 3 identical quadrants.

Find the perimeter of the following figure. (Take $\pi = \frac{22}{7}$)



- (1) 33 cm
- (2) 44.5 cm
- (3) 54 cm
- (4) 61 cm

(Go on to Booklet B)

METHODIST GIRLS' SCHOOL

Founded in 1887



MID-YEAR EXAMINATION 2013 PRIMARY 6 MATHEMATICS

PAPER 1 (BOOKLET B)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 6 _____

Date: 14 May 2013

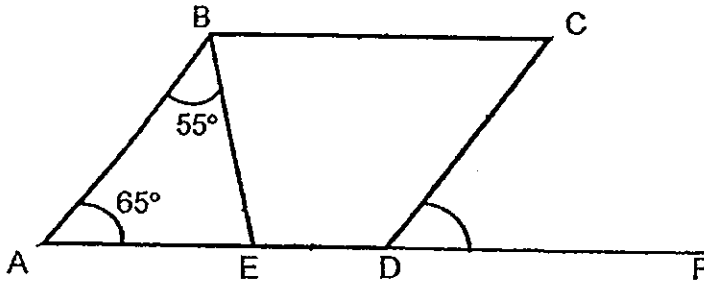
Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
TOTAL	/ 100

This booklet consists of 8 printed pages including this page.

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated.

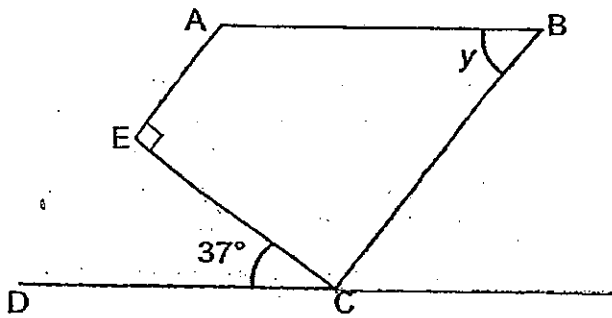
(10 marks)

- 16 In the figure below, ABCD is a parallelogram. AF is a straight line.
 $\angle BAE = 65^\circ$ and $\angle ABE = 55^\circ$. Find $\angle CDF$.



Ans: _____

- 17 In the figure below, AB is parallel to DC and AE is parallel to BC. Find $\angle y$.



Ans: _____

(Go on to the next page)

- 18 Find the value of $0.9 - 0.08$ as a fraction in the simplest form.

Ans: _____

- 19 Angela had 2.5 m of ribbon. She gave her sister 1.4 m of it. What is the ratio of the length of the ribbon Angela had left to that of her sister's?

Ans: _____

- 20 The ratio of the number of stamps Henry has to the number of stamps Sally has is 3 : 1. Henry has 48 stamps more than Sally. How many stamps does Henry have?

Ans: _____

(Go on to the next page)

- 21 The ratio of the number of boys to the number of girls in a club was 2 : 3 at first. After 4 boys left the club, the ratio of the number of boys to the number of girls became 1 : 2. How many girls were there?

Ans: _____

- 22 10% of a is equal to 15% of 200. What is a ?

Ans: _____

- 23 Adrian cycled at a speed of 30 km/h for 1 h 30 min and completed the rest of the journey at 20 km/h in 30 min. Find the average speed of the whole journey.

Ans: _____ km/h

(Go on to the next page)

- 24 A table with 5 columns is filled with numbers in the following way.

Column A	Column B	Column C	Column D	Column E
2	4	6	8	10
20	18	16	14	12
22				

In which column will the number 78 be?

Ans: _____

- 25 What is the largest 5-digit odd number that can be formed using all the digits 6, 0, 5, 7 and 2?

Ans: _____

(Go on to the next page)

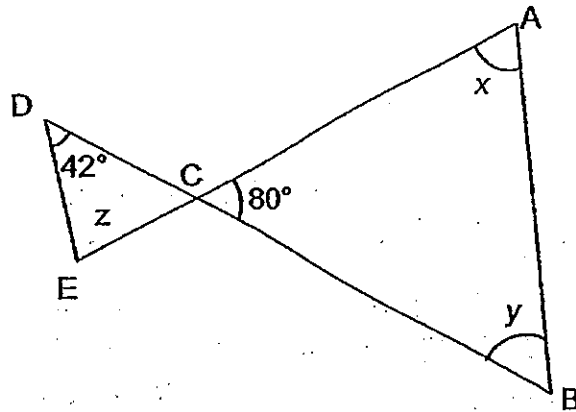
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

- 26 The pencils in a stationery store are sold at 4 for p cents.
How many pencils can Ali buy with \$2?

Ans: _____

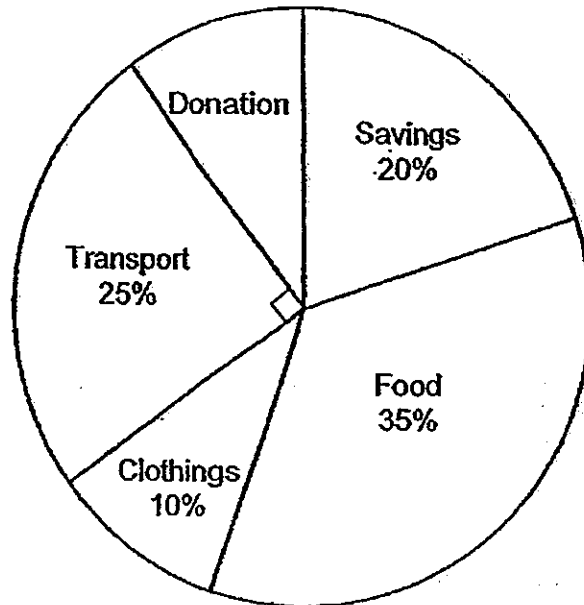
- 27 In the figure below, ACE and BCD are straight lines.
 $\angle CDE = 42^\circ$ and $\angle ACB = 80^\circ$. Find the sum of $\angle x$, $\angle y$ and $\angle z$.



Ans: _____

(Go on to the next page)

- 28 The pie chart below shows how Andrea spends her monthly salary. If Andrea saves \$500 every month, how much does she donate every month?



Ans: \$ _____

(Go on to the next page)

- 29 The table below shows the printing speed of a printer.

Type of print	Number of pages per minute
Black and White	15
Colour	10

Raju printed 40 pages in black and white and 15 pages in colour.
How long did the printer take to print the pages?

Ans:___

- 30 Jason bought 4 T-shirts and 2 pairs of jeans for \$180. A pair of jeans cost 3 times as much as a T-shirt. Find the cost of a pair of jeans.

Ans: \$ _____

End of Paper

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



MID-YEAR EXAMINATION 2013 PRIMARY 6 MATHEMATICS

PAPER 2

Duration: 1h 40 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.

Answer all questions.

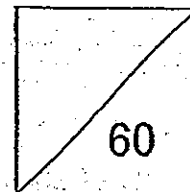
Write your answers in this booklet.

The use of an approved calculator is expected, where appropriate.

Name: _____ ()

Class: Primary 6. _____

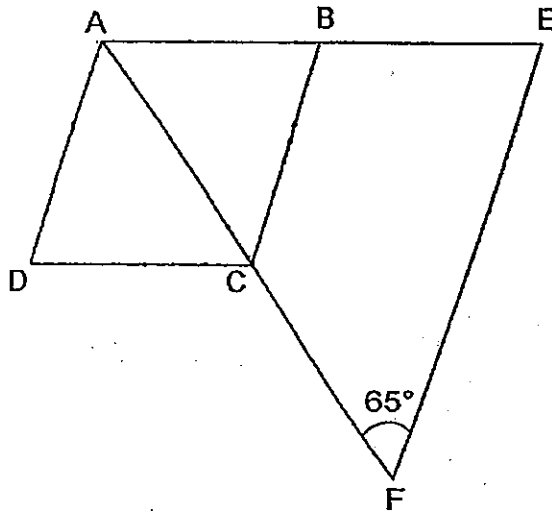
Date: 14 May 2013



This booklet consists of 15 printed pages including this page.

Questions 1 to 5 carry 2 marks each. Show your workings clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 1 In the figure below, ABCD is a rhombus.
BC is parallel to EF and $\angle AFE = 65^\circ$. Find $\angle ADC$.



Ans: _____°

- 2 Joan has \$150. Jasmine has 40% more than her. Express the amount of money Joan has as a percentage of the amount of money Jasmine has. Give your answer as a mixed number in the simplest form.

Ans: _____ %

(Go on to the next page)

- 3 There were 480 children in the school hall. 250 of them were boys. An hour later, 90 boys left the hall. What percentage of the number of children left in the hall are boys? (Round off your answer to 1 decimal place)

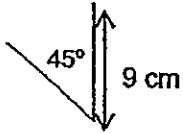
Ans: _____ %

- 4 Ali and Zhixiang started driving from the same place but in opposite directions along a straight road. After 2 hours, they were 222 km apart. If Ali's average speed was 63 km/h, what was Zhixiang's average speed?

Ans: _____ km/h

(Go on to the next page)

- 5 The figure below shows part of a circle. Find its perimeter. (Take $\pi = \frac{22}{7}$)



(Go on to the next page)

For Questions 6 to 18, show your working clearly in the space below each question and write your answer in the spaces provided. The number of marks available is shown in the brackets [] at the end of each question or part-question. (50 marks)

- 6 Sarah had some coins in her coin box. One tenth were 10-cent coins, $\frac{3}{5}$ of them were 20-cent coins and the rest were 50-cent coins. There were 6 more 20-cent coins than 50-cent coins. How much money was in the coin box?

Ans: _____ [3]

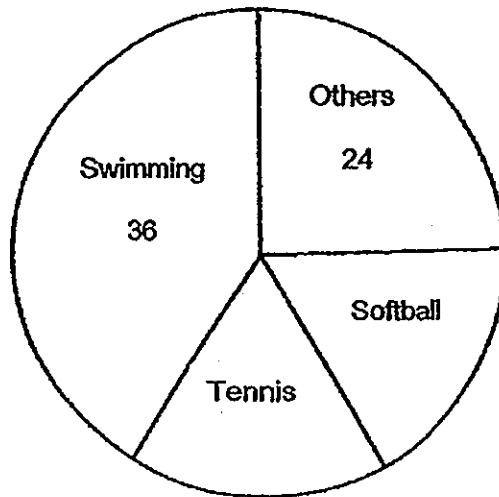
- 7 Box A and Box B contained only purple and yellow beads. In Box A, the ratio of the number of purple beads to the number of yellow beads was 4 : 3. In Box B, the ratio of the number of purple beads to the number of yellow beads was 3 : 1. There were 10 more purple beads in Box B than the number of purple beads in Box A. If the 2 boxes contained the same total number of beads, how many beads were there in the 2 boxes?

Ans: _____ [3]

(Go on to the next page)

- 8 The pie chart represents the Co-curricular activity chosen by 90 pupils. Each pupil chose only one activity. An equal number of pupils chose Softball and Tennis.

- (a) How many pupils are there in Tennis?
(b) What percentage of the pupils chose Swimming?



Ans: (a) _____ [2]

(b) _____ [1]

(Go on to the next page)

- 9 A wheel has a radius of 32 cm. The distance from Point X to Point Y is 940 cm. How many turns will the wheel make to cover the distance from Point X to Point Y? Round off your answer to the nearest whole number.

(Take $\pi = \frac{22}{7}$)



Ans: _____ [3]

- 10 A pack of bookmarks was shared among a group of boys. Another pack containing an equal number of bookmarks was shared among a group of girls. Each boy received 5 bookmarks and each girl received 3 bookmarks. There were 18 more girls than boys. How many bookmarks were there altogether?

Ans: _____ [3]

(Go on to the next page)

- 11 The table shows the parking charges at a car park.

Parking Charges	
For the first hour	$\$b$
For every additional $\frac{1}{2}$ h	$\$\frac{b}{5}$

Mrs Lee parked her car for $3\frac{1}{2}$ hours at the car park.

- (a) How much did Mrs Lee pay for parking her car at the car park?
Give your answer in term of b .
- (b) If Mrs Lee paid a parking charge of \$8, what is the rate for the first hour?

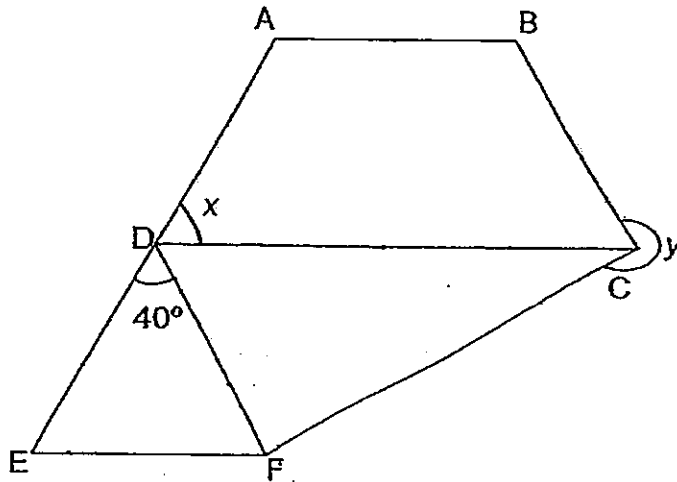
Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

- 12 In the figure below, ABCD is a trapezium and DEF is an isosceles triangle. ADE is a straight line. BC is parallel to DF and DC is parallel to EF. $\angle EDF = 40^\circ$ and $\angle DFC = 90^\circ$

- (a) Find $\angle x$
(b) Find $\angle y$



Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

- 13 25% of the total number of children in a karate club were girls. After 15 boys left and 15 girls joined the club, the number of boys then became $\frac{9}{16}$ of the total number of children.

(a) How many children were there in the club at first?

(b) How many boys were there in the end?

Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

14 Tim and Jeffrey both drove from Town A to Town B. Tim started his journey at 9 a.m and travelled at an average speed of 75 km/h. Jeffrey started his journey some time later. At 11 a.m., Jeffrey overtook Tim. When Jeffrey reached Town B at 1 p.m., Tim was 50 km from Town B.

- (a) Find Jeffrey's average speed.
- (b) At what time did Jeffrey start his journey?

Ans: (a) _____ [2]

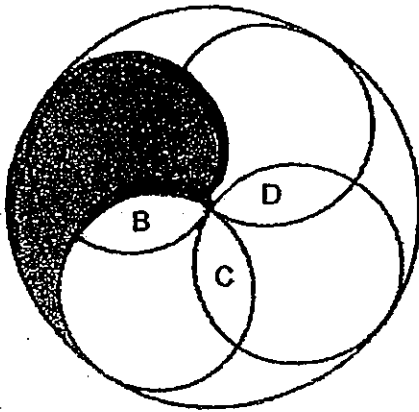
(b) _____ [2]

(Go on to the next page)

- 15 Four identical circles of diameter 10 cm are arranged in a big circle. The four parts A, B, C and D are arranged in such a way that they are equal.

(Take $\pi = 3.14$)

- (a) Find the area of the shaded part.
(b) Find the perimeter of the shaded part.



Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

- 16 Mrs Wong gave 20% of her money to a charity. She gave the rest of her money to her three children, Mark, Nicholas and Owen in the ratio 7 : 2 : 3. If Mark gave \$1 600 to Nicholas, Nicholas would have half as much as Mark.

(a) How much money did Mrs Wong have at first?

(b) How much money did Owen receive from his mother?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

17 Ailing and Lily played a game using the stickers.

At first, 25% of the number of stickers that Ailing had was $\frac{1}{3}$ of the number of stickers that Lily had.

In the first round, Ailing lost 65 of her stickers to Lily.

In the second round, Lily lost 30 of her stickers to Ailing.

After the game, they had the same number of stickers.

(a) How many stickers did Ailing have at first?

(b) How many stickers did Lily have in the end?

(a) _____ [3]

(b) _____ [2]

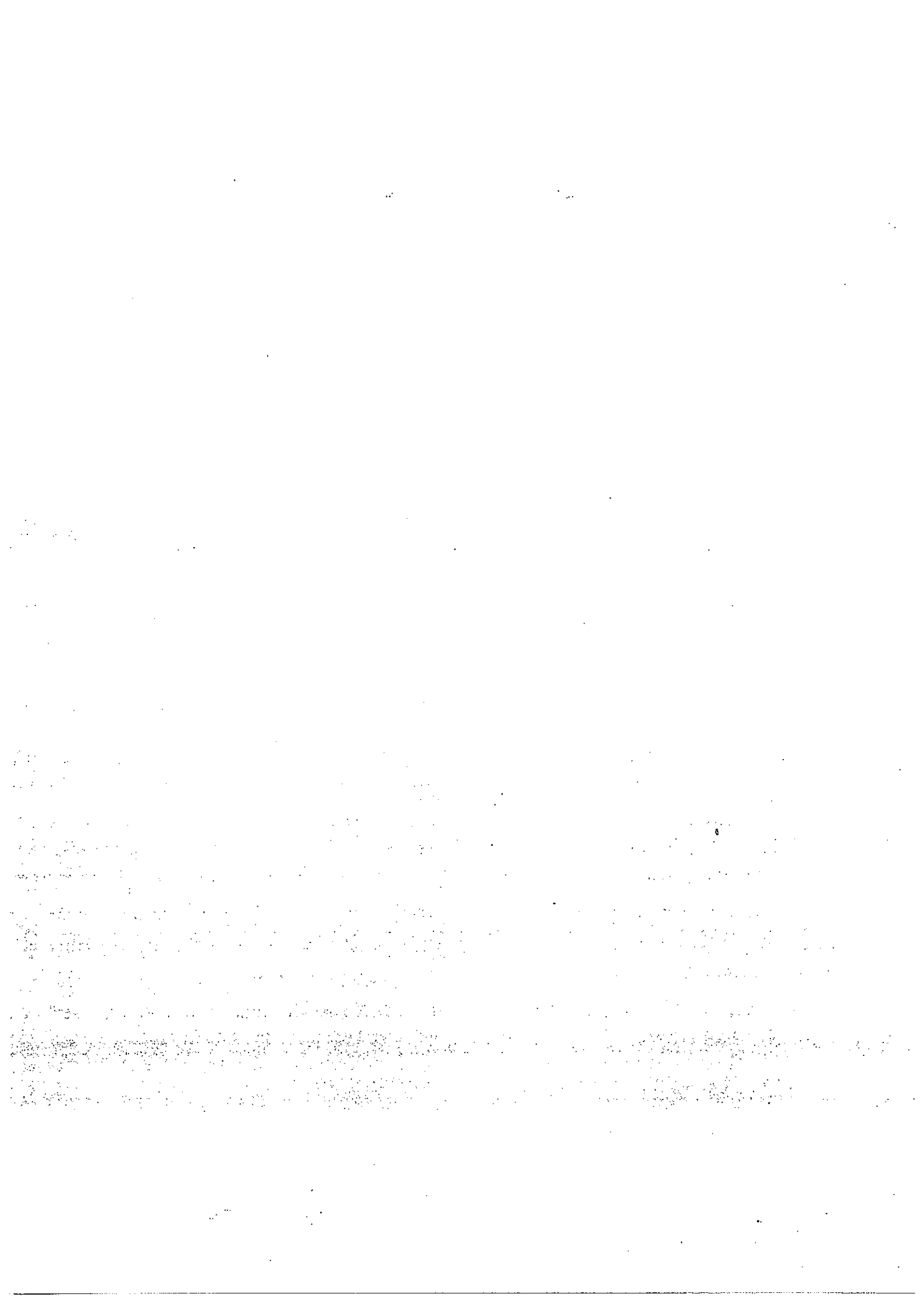
(Go on to the next page)

- 18 Alex and Jen had an equal amount of flour. Jen packed her flour equally into 6 big bags. Alex packed his flour into smaller bags and found he had twice as many bags as Jen. The mass of 3 small bags and 1 big bag of flour was 20 kg.
- (a) What was the mass of the flour they had?
- (b) Find the total mass of a big bag and a small bag of flour.

Ans: (a) _____ [3]

(b) _____ [2]

End of Paper





ANSWER SHEET

EXAM PAPER 2013

SCHOOL : MGS

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
4	3	1	2	2	2	1	2	3	2	4	4	2	2	4

16) 65° 17) 53° 18) $41/50$ 19) $11:14$ 20) 72 stamps

21) 24 girls 22) 300 23) 27.5 km/h 24) Column B 25) 76205

26) $800/p$ 27) 158° 28) \$250 29) $41/6$ min 30) \$54

Paper 2

1) $\angle EFA = \angle BCA = 65^\circ$
 $\angle BCA = \angle CAD = \angle ACD = 65^\circ$
 $65^\circ \times 2 = 130^\circ$
 $180^\circ - 130^\circ = 50^\circ$
 $\angle ADC$ is 50°

2) $140/100 \times 150 = 210$
 $150/210 \times 100\% = 71.4\%$

3) $250 - 90 = 160$
 $480 - 90 = 390$
 $160/390 \times 100\% \approx 41.0\%$

The percentage is 41.0%

4) $63 \times 2 = 126$

$222 - 126 = 96$

$96 \div 2 = 48$

His average speed is 48km/h

5) $9 \times 2 = 18$

$22/7 \times 18 = 564/7$

$564/7 \div 8 = 71/14$

$71/14 \times 7 = 49\frac{1}{2}$

$49\frac{1}{2} + 18 = 67\frac{1}{2}$

Its perimeter is $67\frac{1}{2}$ cm

6) $1 - 1/10 - 3/5 = 3/10$

$3/5 - 3/10 = 3/10$

3u → 6 coins

1u → 2 coins

6u → 12 coins

$6 \times 50 = 300$

$10 \times 2 = 20$

$12 \times 20 = 240$

$300 + 20 + 240 = 560$

$560c = \$5.60$

\$5.60 was in the box

7) $21 - 16 = 5$

5u → 10 beads

$16 + 12 + 21 + 7 = 56$

56u → $56 \times 10/5$ beads = 112 beads

There were 112 beads in the 2 boxes

8) a) $90 - 36 - 24 = 30$

$30 \div 2 = 15$

There are 15 pupils in Tennis

b) $36/90 \times 100\% = 40\%$

The percentage is 40%

9) $32 \times 2 = 64$

$22/7 \times 64 = 2011/7$

$940 \div 2011/7 \approx 5$

It will make 5 turns

$$10) 5b = 3 \times (b + 18)$$

$$5b = 3b + 54$$

$$2b = 54$$

$$b = 27$$

$$27 \times 5 = 135$$

$$27 + 18 = 45$$

$$45 \times 3 = 135$$

$$135 \times 2 = 270$$

There were 270 bookmarks

$$11)a) 3\frac{1}{2} - 1 = 2\frac{1}{2}$$

$$2\frac{1}{2}h = \text{five } \frac{1}{2} \text{ hours}$$

$$\frac{5}{6} \times 5 = b$$

$$b + b = 2b$$

She has to pay \$2b for parking her car at the car park

$$b) 2b \rightarrow \$8$$

$$b \rightarrow \$8/2$$

$$= \$4$$

The rate for the first hour is \$4

$$12)a) 180 - 40 = 140$$

$$140 \div 2 = 70 (\angle DEF / \angle DFE)$$

$$\angle DFE = \angle FDC = 70^\circ$$

$$\angle X \text{ is } 70^\circ$$

$$b) 180 - 70 - 90 = 20 (\angle DCF)$$

$$\angle X = \angle BCD = 70^\circ$$

$$360 - 70 - 20 = 270^\circ$$

$$\angle y \text{ is } 270^\circ$$

$$13)a) 16 - 9 = 7$$

$$12 - 9 = 3$$

$$3u \rightarrow 15 \text{ children}$$

$$16u \rightarrow 16 \times 15/3 \text{ children}$$

$$= 80 \text{ children}$$

There were 80 children at first

$$b) 9u \rightarrow 9 \times 15/3 \text{ children}$$

$$= 45 \text{ children}$$

There were 45 boys in the end

$$14)a) 75 \times 2 = 150$$

$$75 \times 4 = 300$$

$$300 - 150 = 150$$

$$150 + 50 = 200$$

$$200 \div 2 = 100$$

Jeffrey's average speed is 100km/h.

14)b) $300 + 50 = 350$

$350 \div 100 = 3.5 = 3\frac{1}{2}$

He started his journey at 9.30a.m.

15)a) big circle radius $\rightarrow 10\text{cm}$

$3.14 \times 10 \times 10 = 314$

$314 \div 4 = 78.5$

The area of the shaded part is 78.5cm^2

b) $3.14 \times 10 = 31.4$ (perimeter of line)

$31.4 \div 2 = 15.7$

$15.7 + 31.4 = 47.1$

The perimeter is 47.1cm

16)a) $7 + 2 = 9$

$9 \div 3 = 3$

$3 - 2 = 1$

$1\text{u} \rightarrow \$1600$

$1600 \times 12 = 19200$

$80\% \rightarrow \$19200$

$100\% \rightarrow \$100 \times 19200 / 80 = \24000

She had $\$24000$ at first

b) $3 \times 1600 = 4800$

He received $\$4800$ from his mother.

17)a) $4u - 35 = 3u + 35$

$4u = 3u + 70$

$1u = 70$

$4 \times 70 = 280$

Ailing had 280 stickers at first

b) $3 \times 70 = 210$

$210 + 35 = 245$

Lily had 245 stickers in the end.

18)a) $6 \times 2 = 12$

$3\text{sb} + 1\text{bb} = 20\text{kg}$

$18\text{sb} + 6\text{bb} = 120\text{kg}$

$6\text{bb} = 12\text{sb}$

$18\text{sb} + 12\text{sb} = 120\text{kg}$

$30\text{sb} = 120\text{kg}$

$\text{sb} = 4\text{kg}$

$3\text{sb} = 12\text{kg}$

$12\text{sb} = 48\text{kg}$

$20 - 12 = 8$ (1bb)

$8 \times 6 = 48$

$48 + 48 = 96$

They had 96kg of flour

b) $8 + 4 = 12$

The total mass of 1 big bag and 1 small bag of flour is 12kg.



NAN HUA PRIMARY SCHOOL
SEMESTRAL EXAMINATION 1 – 2013
PRIMARY 6

MATHEMATICS

Paper 1

Section A: 15 Multiple Choice Questions (20 marks)

Section B: 15 Short Answer Questions (20 marks)

Total Time for Paper 1: 50 minutes

INSTRUCTION TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided for Questions 1-15.
6. You are not allowed to use calculator for Paper 1.

Marks Obtained

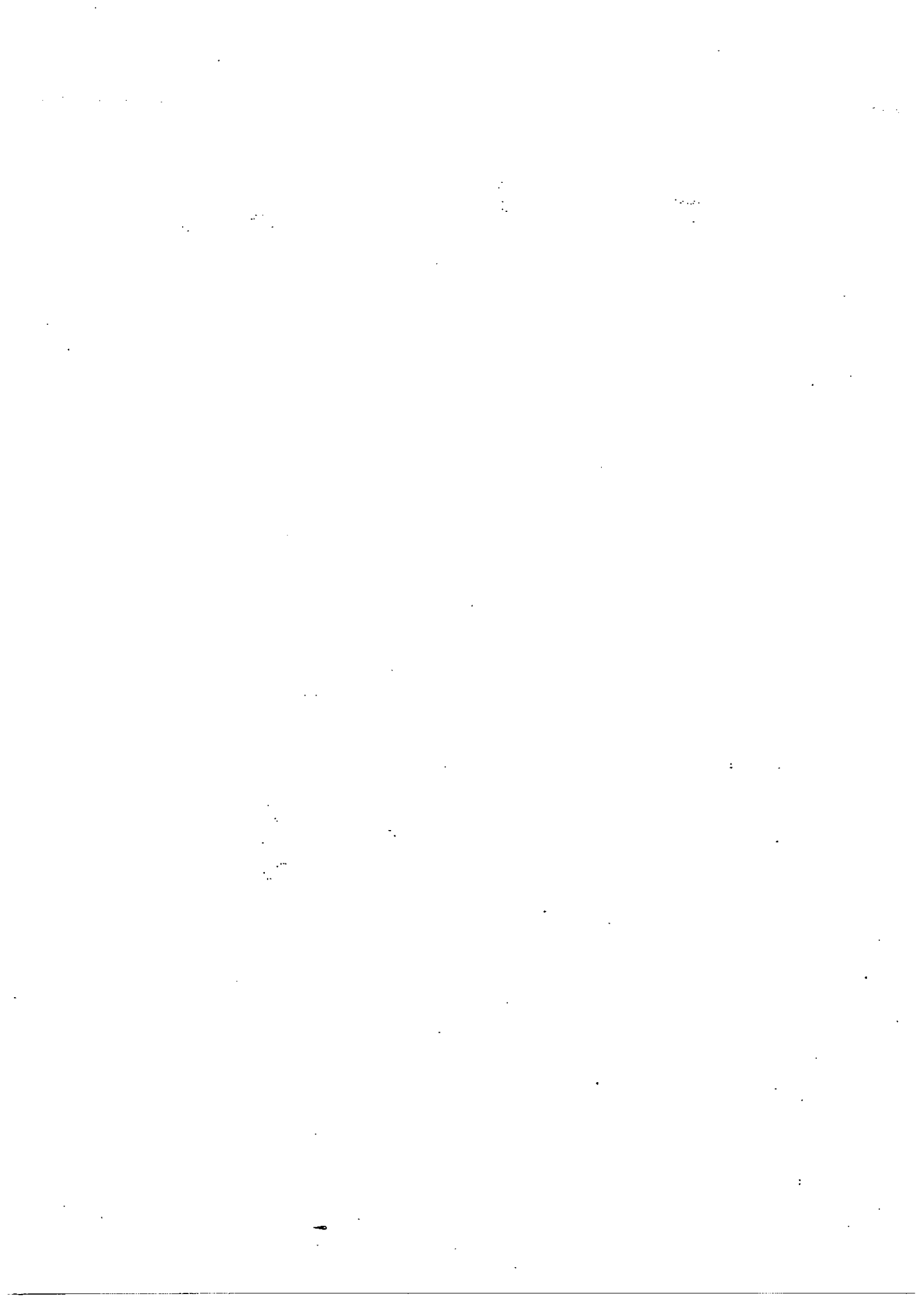
Paper 1	Booklet A		/ 40
	Booklet B		
Paper 2			/ 60
Total			/ 100

Name : _____ ()

Class : _____

Date : 14 May 2013

Parent's Signature : _____



Section A (20marks)

Questions 1 to 10 carry 1 mark each.

Questions 11 to 15 carry 2 marks each.

For each question, four options are given. One of them is the correct answer.

Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. How many eighths are there in $2\frac{5}{8}$?

- (1) 16
- (2) 18
- (3) 21
- (4) 25

()

2. Express $\frac{3}{7}$ as a decimal. Give your answer correct to 2 decimal places.

- (1) 0.42
- (2) 0.43
- (3) 2.33
- (4) 2.34

()

3. The cost of a Toyota car, correct to the nearest thousand, is \$140 000.
Which one of the following could be the actual cost of the car?

- (1) \$138 599
- (2) \$139 499
- (3) \$140 499
- (4) \$140 599

()

4. Simplify $5a + 9 - 3a - 4$.

- (1) $2a - 5$
- (2) $2a + 5$
- (3) $8a + 13$
- (4) $8a - 13$

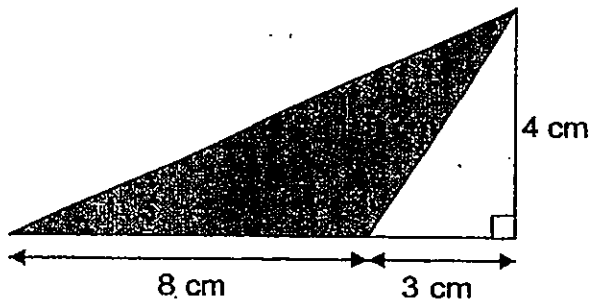
()

5. Express 80 ml as a ratio of 4 l in its simplest form.

- (1) $1 : 2$
- (2) $1 : 5$
- (3) $1 : 20$
- (4) $1 : 50$

()

6. Find the shaded area of the figure.



- (1) 12 cm^2
- (2) 16 cm^2
- (3) 20 cm^2
- (4) 32 cm^2

()

7. Siti bought some oranges. She found out that $\frac{11}{25}$ of them were rotten. What percentage of her oranges was not rotten?

- (1) 11%
- (2) 14%
- (3) 44%
- (4) 56%

()

8. At a meeting, the number of male was $\frac{5}{7}$ of the number of female. Express the number of female as a ratio of the total number of people.

- (1) 5 : 7
- (2) 7 : 5
- (3) 5 : 12
- (4) 7 : 12

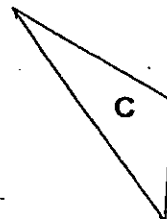
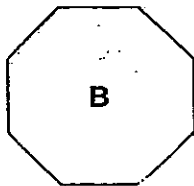
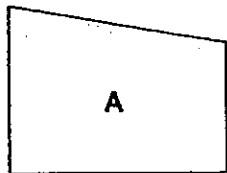
()

9. Which of the following fractions is the largest?

- (1) $\frac{13}{16}$
- (2) $\frac{7}{12}$
- (3) $\frac{7}{8}$
- (4) $\frac{3}{4}$

()

10. Mdm Fatimah wants to lay her bedroom floor with tiles of only one shape. The tiles must fit together without any gaps or overlaps between them. Which of the following shapes can she choose from?

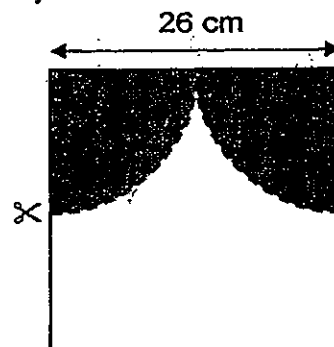


- (1) A only
 (2) A and C only
 (3) B and C only
 (4) A, B and C
- ()
11. The ratio of Bobby's money to Albert's money was 4 : 5. Albert's mother gave him some money, and as a result, the ratio of Bobby's money to Albert's money became 2 : 3. What was the percentage increase in Albert's money?

- (1) 50%
 (2) 30%
 (3) 25%
 (4) 20%

()

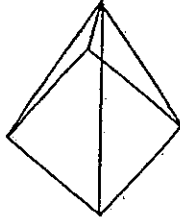
12. Two quadrants of the same radius are cut out from a square as shown below. Find the perimeter of the figure that is left. (Leave your answer in terms of π)



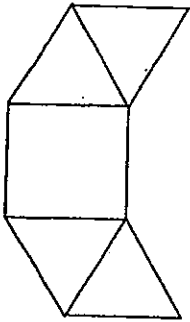
- (1) $(13\pi + 52)$ cm
 (2) $(13\pi + 104)$ cm
 (3) $(26\pi + 52)$ cm
 (4) $(26\pi + 104)$ cm

()

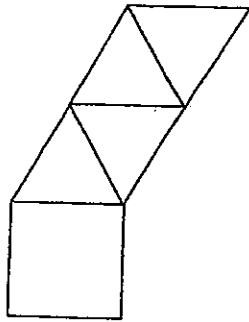
13.



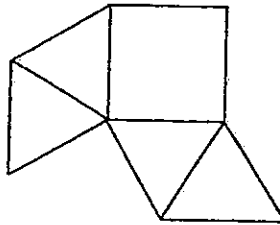
Which one of the following nets can be folded to form the pyramid shown above?



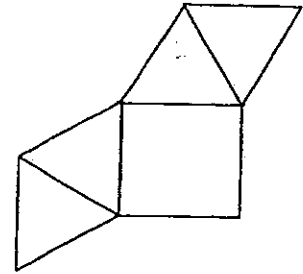
A



B



C



D

- (1) A
- (2) B
- (3) C
- (4) D

()

14. John can buy either 36 identical pens or 24 identical files with the money he has. After buying 8 such files and 18 such pens, how many more such pens can John buy with the remaining money he has?

- (1) 24
- (2) 18
- (3) 6
- (4) 4

)

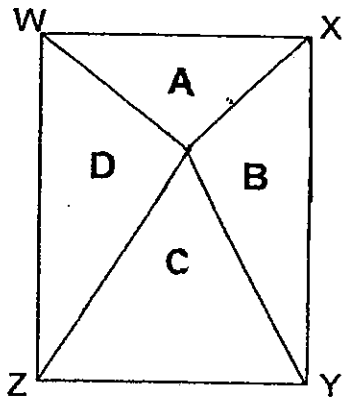
15. WXYZ is a rectangle formed using 4 triangles A, B, C and D.

The area of Triangle A is 72 cm^2 .

The ratio of area of Triangle C to area of Triangle B is $13 : 10$.

The area of Triangle D is $\frac{6}{5}$ the area of Triangle B.

Find the area of rectangle WXYZ.



(1) 352 cm^2

(2) 324 cm^2

(3) 288 cm^2

(4) 282 cm^2

Section B (20 marks)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. [10 marks]

16. Find the value of $\frac{5}{6} + \frac{1}{4}$

Express your answer as a mixed number in the simplest form.

Ans: _____

17. Express 1.25 as a percentage.

Ans: _____ %

18. If $y = 4$, find the value of $\frac{5y - 6}{2}$

Ans: _____

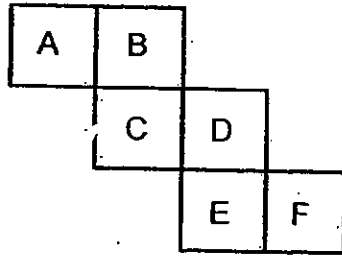
19. John has \$8. He has k times as much money as his sister. How much does his sister have?

Ans: \$ _____

Subtotal	/ 4
----------	-----

20. The figure below shows the net of a cube.

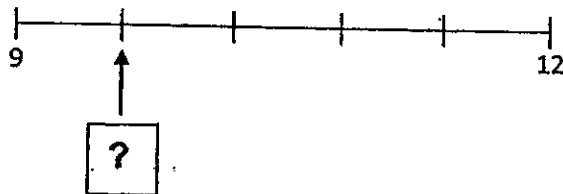
If the figure is folded to make a cube, which letter will be directly opposite letter A?



Ans : _____

21. The figure below shows a number line.

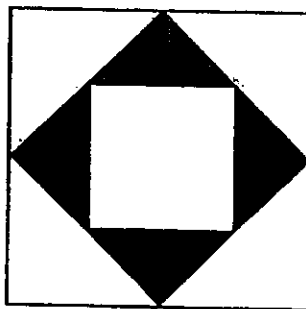
What is the value indicated by the arrow?



Ans : _____

22. The figure below is made up of 3 squares of different sizes.

What fraction of the figure is shaded?



Ans : _____

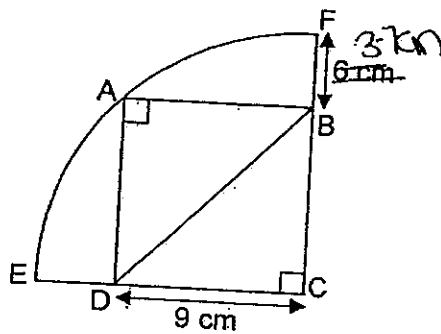
Subtotal	/ 3
----------	-----

23. How many of the following letters has/have only 1 line of symmetry?

L U C K

Ans : _____

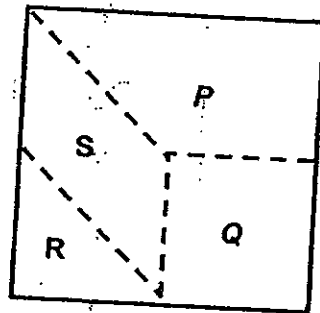
24. ABCD is a square within a quadrant CEF. Find the length of the line BD.



Ans: _____ cm

25. The figure below is a square made up of four parts, P, Q, R and S.

Q is a square and is $\frac{1}{4}$ of the figure. S is a parallelogram.



What percentage of the figure is S?

Ans : _____ %

Subtotal	/ 3
----------	-----

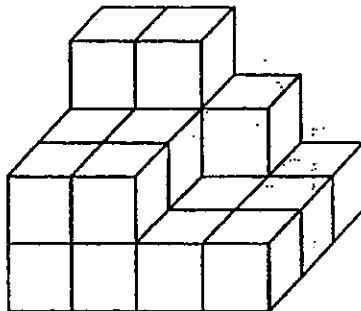
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For each questions which require units, give your answers in the units stated. [10 marks]

26. The area of a square is 121 cm^2 . What is the perimeter of the square?

Do not write
in this space

Ans : _____ cm

27. The figure below is made up of identical cubes. Without re-arranging the existing cubes, what is the **least** number of similar cubes to be added to change the figure into a cuboid?



Ans : _____

Subtotal	/ 4
----------	-----

28. Kathy travelled 40 km in 20 min and another 30 km in 20 min. Find her average speed for the whole journey, giving your answer in km/h.

Do not write
in this space

Ans : _____ km/h

29. Auntie Nora has $\frac{9}{10}$ kg of chilli powder. She repacks them into packets of 15 g each. How many such packets does she get?

Ans : _____

30. A snail is at the bottom of a 15 m well. For every 3 m it climbs in 3 min, it will rest for the next 2 min. At this rate, how long does it take for the snail to reach the top of the well?

Ans : _____ min

Subtotal

/ 6

END OF PAPER





NAN HUA PRIMARY SCHOOL
SEMESTRAL EXAMINATION 1 – 2013
PRIMARY 6

MATHEMATICS

Paper 2

Total Time for Paper 2: 1 hour 40 minutes

5 Short Answer Questions (10 marks)

13 Structured / Long Answer Questions (50 marks)

INSTRUCTION TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully
4. Answer all questions and show your workings clearly.
5. You are allowed to use a calculator.

Marks Obtained

Total		/ 60
-------	--	------

Name : _____ ()

Class : 6 _____

Date : 14 May 2013

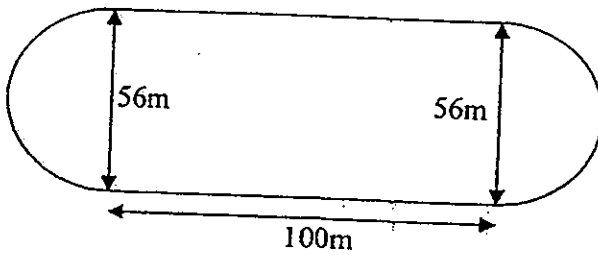
Parent's Signature : _____



Section A (10 marks)

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

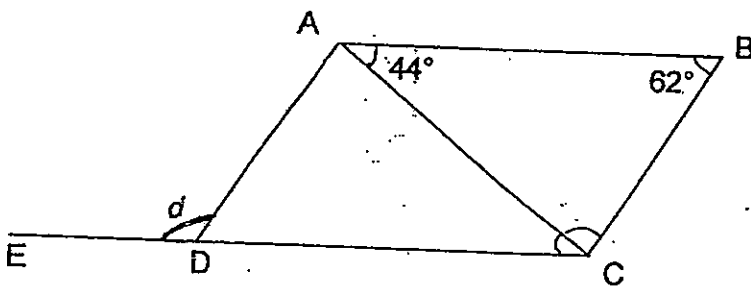
1. The figure below shows a running track with its semi-circular ends. Find the perimeter of the running track.
(Take $\pi = \frac{22}{7}$)



Ans: _____ m

Do not write
in this space

2. In the figure below, ABCD is a parallelogram (not drawn to scale). EDC is a straight line. Find $\angle d$.



Ans . _____ °

3. Mr Ong has 40 cars and bicycles altogether. There are a total of 110 wheels. Find the number of cars Mr Ong has.

Ans : _____

4. Mrs Tan spent \$450 of her monthly salary and saved the rest. When she increased her monthly spending by 30%, her savings decreased by 10%. Find her monthly salary.

Ans : \$ _____

5. The table below shows the parking charges at a shopping mall.

Duration	Rates
First 1 hour or less	\$2.14
Subsequent 30 min or part thereof	\$1.07

Mr Hamilton parked his car at the mall from 2.40 p.m. to 5.05 p.m. How much parking charges would he have to pay?

Ans: \$ _____

Section B (50 marks)

For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in the brackets [] at the end of each question or part question. Remember to include the units wherever possible.

6. The average height of 4 girls was 120 cm. When Jane joined them, the average height increased by 9 cm. What was Jane's height?

Ans : _____ [3m]

7. Mrs Lim buys a water melon. She keeps $\frac{1}{4}$ of it for her husband. Her children share the remaining water melon. Each child eats $\frac{1}{8}$ of the water melon. How many children does she have?

Ans : _____ [3m]

8. Jun Kai had just enough pocket money to buy some \$1.50 burgers or \$1.20 burgers. He realised that if he had spent all his money on \$1.50 burgers, he would have 8 burgers fewer than if he had spent \$1.20 per burger. How much was his pocket money?

Ans : _____ [3m]

9. Mr Wong is $9k$ years old now. He has 2 sons, Bryan and Nigel. He is 3 times as old as Nigel now. Bryan is $2k$ years younger than Nigel.

- (a) How old is Bryan now?
(b) How old will Mr Wong be when Bryan is 18 years old?

Leave your answers for both (a) and (b) in terms of k .

Ans : (a) _____ [1m]

(b) _____ [2m]

10. A baker made some cupcakes for sale. He sold 450 cupcakes in the morning and $\frac{3}{5}$ of the remainder in the afternoon. He was left with 10% of the original number of cupcakes. How many cupcakes did he make?

Ans : _____ [3m]

11. Bob, Clement, Dominic went to buy a gift for Mrs Lee. They shared the cost equally among themselves. However, Dominic forgot to bring his money. So, his friends paid for the gift first. The ratio of the amount Bob paid to the amount Clement paid was 4 : 5. The next day, Dominic returned \$18.90 to Clement and some money to Bob. What is the cost of the gift?

Ans _____ [3m]

12. A van took 3 hours to travel from Town A to Town B at an average speed of 65 km/h. A lorry travelled along the same route at an average speed of 75 km/h. The lorry arrived at Town B at 1630.
- (a) What was the distance from Town A to Town B?
 - (b) At what time did the lorry leave Town A?

Ans : (a) _____ [2m]

(b) _____ [2m]

13. The original selling price of a computer was \$2800. A shop sold it at a discount of 20% during a sale. If the shop charged a 7% GST on the discounted price,

- (a) how much was the GST?
- (b) how much was the computer sold including GST?

Ans : (a) _____ [2m]

(b) _____ [2m]

14. The ratio of the number of male to the number of female in the hall was 5 : 3. The number of male to the number of female in the auditorium was 7 : 1. There were twice as many people in the hall as in the auditorium.
- (a) What was the ratio of the number of female in the hall to the number of male in the auditorium?
- (b) When 18 male left the auditorium and 16 female went into the auditorium, the ratio of the number of male to the number of female in the auditorium became 2 : 1.
How many male were there in the auditorium in the end?

Ans : (a) _____ [1m]

(b) _____ [3m]

15. The pattern below is made up of circles and triangles.
Study the pattern carefully and answer the questions below.

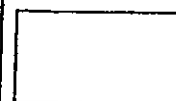
Pattern 1	Pattern 2	Pattern 3	Pattern 4
○	○ △ ○ ○	○ △ △ ○ △ △ ○ ○ ○	○ △ △ △ ○ △ △ △ ○ △ △ △ ○ ○ ○ ○

- (a) How many circles are needed to form Pattern 6?
 (b) Which Pattern number has exactly 144 triangles?
 (c) The number of circles used in Pattern N is exactly the same as the number of triangles used to form Pattern 20. What is N?

Ans : (a) _____ [1m]

(b) _____ [2m]

(c) _____ [2m]



16. Jonathan and Benjamin started brisk walking from Point A but in opposite direction. After walking for $\frac{3}{4}$ h, they were 7.2 km apart. Jonathan's speed was 1.4 km/h slower than Benjamin.

(a) Find Jonathan's speed.

(b) If Benjamin continued to brisk walk for another $\frac{1}{2}$ h, find the total distance covered by him. Give your answer correct to 1 decimal place.

Ans : (a) _____ [3m]

(b) _____ [2m]



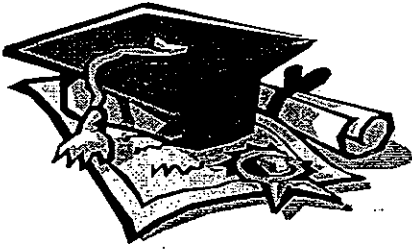
17. Two different tanks, A and B, were filled with water.
If Tank A leaked 10 ml of water each hour and Tank B leaked 5 ml of water each hour, Tank A would still have 300 ml of water left when Tank B became empty.
If Tank A leaked 5 ml of water each hour and Tank B leaked 10 ml of water each hour, Tank A would still have 750 ml of water left when Tank B was empty.
How much water was there in tank A at first?

Ans: _____ [5m]

18. A factory manufactured 2620 'Small', 'Medium' and 'Large' size T-shirts. The ratio of the number of 'Medium' size T-shirts to the number of 'Small' size T-shirts was 1 : 3. After $\frac{3}{5}$ of the 'Small' size T-shirts, $\frac{1}{4}$ of the 'Large' size T-shirts and none of the 'Medium' size T-shirts were sold, there were 1645 T-shirts left. How many 'Small' size T-shirts were there at first?

Ans: _____ [5m]

————— END OF PAPER —————



ANSWER SHEET

EXAM PAPER 2013

SCHOOL : NAN HUA

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
3	2	3	2	4	2	4	4	3	2	4	1	4	3	1

16) $1\frac{1}{12}$

17) 125%

18) 7

19) $\$(\frac{8}{15})$

20) D

21) 9.6

22) $\frac{1}{4}$

23) 2

24) 12.7cm

25) 25%

26) 44cm

27) 15

28) 105 km/h

29) 60

30) 23 min

Paper 2

1) $22/7 \times 56 = 176$

$176 + 100 + 100 = 376\text{m}$

2) 118°

3) $40 \times 2 = 80$

$110 - 80 = 30$

$4 - 2 = 2$

$30 \div 2 = 15$

4) $450 \div 100 \times 130 = 585$

$585 - 450 = 135$

10% of saving $\rightarrow 135$

100% of saving $\rightarrow 1350$

$1350 + 450 = \$1800$

5) \$5.35

$$\begin{aligned} 6) 120 \times 4 &= 480 \\ 120 + 9 &= 129 \\ 129 \times 5 &= 645 \\ 645 - 480 &= 165\text{cm} \end{aligned}$$

$$\begin{aligned} 7) 1 - \frac{1}{4} &= \frac{3}{4} \\ \frac{3}{4} \div \frac{1}{8} &= \frac{3}{4} \times \frac{8}{1} = 6 \end{aligned}$$

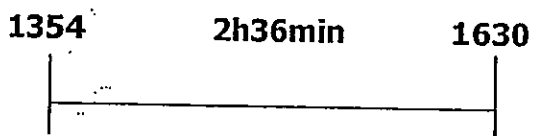
$$\begin{aligned} 8) 8 \times 1.20 &= 9.6 \\ 9.6 \div 0.3 &= 32 \\ 32 \times 1.50 &= 48 \\ 32 + 8 &= 40 \\ 40 \times 1.20 &= \$48 \end{aligned}$$

9) a) 1K years old
b) 26K years old

$$\begin{aligned} 10) \frac{2}{5} &= \frac{1}{10} \text{ of original} \\ \frac{1}{5} &= \frac{1}{20} \text{ of original} \\ \frac{5}{5} &= \frac{5}{20} \text{ of original} \\ 1 - \frac{5}{20} &= \frac{15}{20} \\ \frac{15}{20} \text{ of original} &\rightarrow 450 \\ \frac{1}{20} \text{ of original} &\rightarrow 30 \\ \frac{20}{20} \text{ of original} &\rightarrow 600 \end{aligned}$$

11) \$85.05

$$\begin{aligned} 12) 65 \times 3 &= 195 \\ 195 \div 75 &= \frac{23}{5} \\ 60 \div 5 \times 3 &= 36 \end{aligned}$$



a) 195km
b) 1354 or 1.54p.m.

13) $2800 \div 100 \times 80 = 2240$
 $2240 \div 100 \times 7 = 15680$
 $2240 \div 100 \times 107 = 239680$

- a) \$156.80
b) \$2396.80

14) a) 6 : 7
b) 52

15) a) $6 + 5 = 11$
b) $\sqrt{144} = 12$
 $12 + 1 = 13$
c) $20 - 1 = 19$
 $19 \times 19 = 361$
 $361 - 1 = 360$
 $360 \div 2 = 180$
 $180 + 1 = 181$

16) $1.4 \times \frac{3}{4} = 1.05$
 $7.2 - 1.05 = 6.15$
 $6.15 \div 2 = 3.075$
 $3.075 \div 3 \times 4 = 4.1$
 $4.1 + 1.4 = 5.5$
 $5.5 \div 2 = 2.75$
 $5.5 \div 4 \times 3 = 4.125$
 $4.125 + 2.75 = 6.875$
 $6.875 \approx 6.9$
a) 4.1 km/h
b) 6.9 km

17) 900 ml

18) 1200





NANYANG PRIMARY SCHOOL
FIRST SEMESTRAL EXAMINATION
2013

PRIMARY 6
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	/ 60
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 6 ()

Date: _____

Parent's Signature: _____

Any query on marks awarded should be raised by 22 May 2013. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.

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ANSWER ALL QUESTIONS. YOU ARE ALLOWED TO USE A CALCULATOR.



PAPER 1 (BOOKLET A)

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1 Which one of the following numbers is not a factor of 84?

- (1) 7
- (2) 12
- (3) 27
- (4) 42

2 Arrange the following fractions in increasing order.

$$\frac{2}{3}, \frac{5}{8}, \frac{1}{4}$$

- (1) $\frac{5}{8}, \frac{2}{3}, \frac{1}{4}$
- (2) $\frac{1}{4}, \frac{2}{3}, \frac{5}{8}$
- (3) $\frac{2}{3}, \frac{5}{8}, \frac{1}{4}$
- (4) $\frac{1}{4}, \frac{5}{8}, \frac{2}{3}$

3 Find the value of $3203 \div 5$.

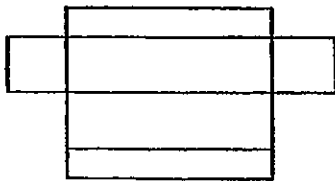
- (1) 64.6
- (2) 640.6
- (3) 646
- (4) 6406

4 The number of boys in a club increased to 25 after 5 more boys joined the club. Find the percentage increase in the number of boys.

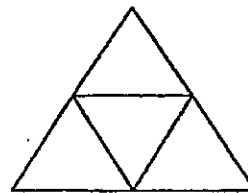
- (1) $16\frac{2}{3}\%$
- (2) 20%
- (3) 25%
- (4) 80%

5 Which one of the following figures is the net of a solid?

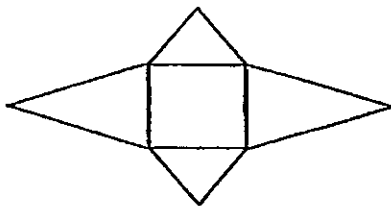
(1)



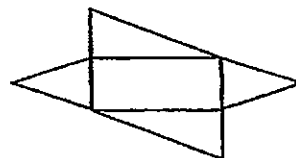
(2)



(3)



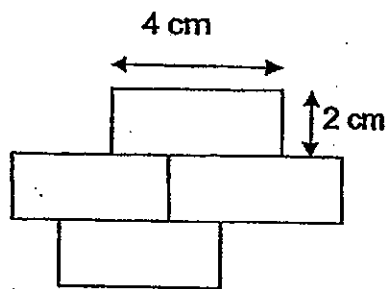
(4)



6 What is the area of a square with a perimeter of 64 cm?

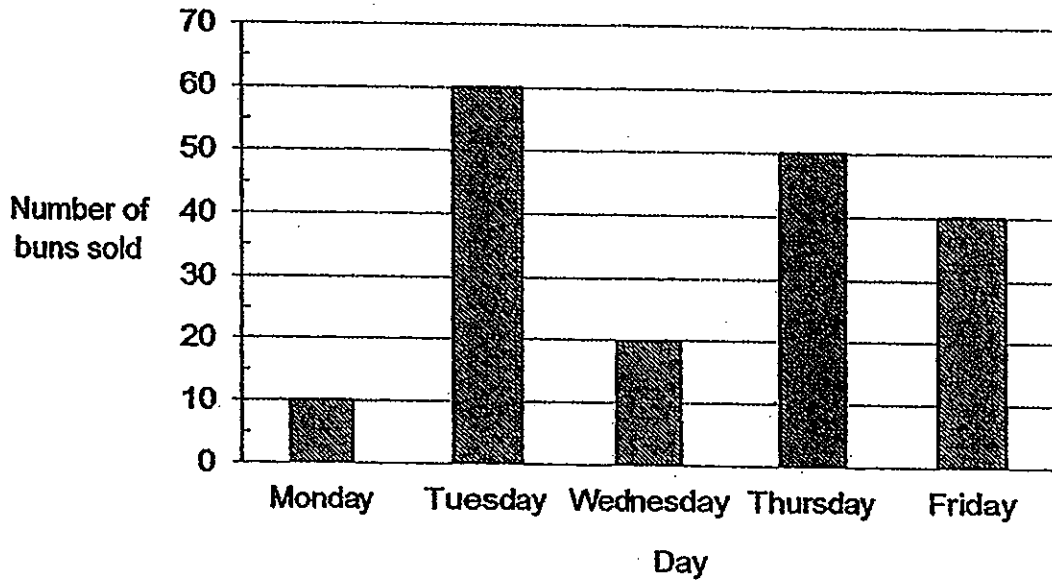
- (1) 8 cm^2
- (2) 32 cm^2
- (3) 64 cm^2
- (4) 256 cm^2

7 The figure below is made up of 4 identical rectangles. What is the perimeter of the figure?



- (1) 20 cm
- (2) 28 cm
- (3) 36 cm
- (4) 48 cm

- 8 The bar graph below shows the number of buns sold by a confectionery shop from Monday to Friday.



On which day was the number of buns sold twice that of the number of buns sold on Wednesday?

- (1) Monday
- (2) Tuesday
- (3) Thursday
- (4) Friday

9 Which one of the following numbers is the largest odd number?

(1) 3598

(2) 3859

(3) 3895

(4) 3958

10 Which one of the following statements is not true?

(1) $3:7 = 6:14$

(2) $15:12 = 5:4$

(3) $30:10 = 9:2$

(4) $50:25 = 2:1$

11 What is the value of $(\frac{2}{3} - \frac{1}{2}) \times \frac{9}{4}$?

(1) $\frac{2}{27}$

(2) $\frac{3}{8}$

(3) $2\frac{5}{8}$

(4) $13\frac{1}{2}$

12 Emma is w years old now. Keith is 3 times as old as Emma now. Hamid is 4 years older than Keith now. How old was Hamid 5 years ago?

(1) $(w + 2)$ years old

(2) $(w + 12)$ years old

(3) $(3w - 1)$ years old

(4) $(3w + 9)$ years old

13 Mr Hewitt left his house at 7.45 a.m. and drove a distance of 105 km to his office. What time did he arrive at his office given his average speed for the journey was 70 km/h?

(1) 8.15 a.m.

(2) 8.20 a.m.

(3) 8.50 a.m.

(4) 9.15 a.m.

14 The length of a rectangle is increased by 20% and its breadth is decreased by 20%. Express the area of the new rectangle as a percentage of the area of the original rectangle.

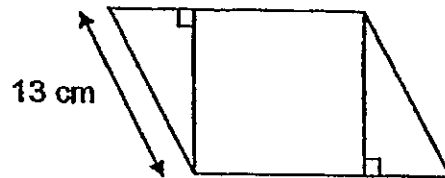
(1) 64%

(2) 96%

(3) 150%

(4) 192%

- 15 The figure below is made up of a square and 2 identical right-angled triangles. The area of the square is 144 cm^2 . The perimeter of the figure is 60 cm . Find the area of one of the triangles.



- (1) 30 cm^2
- (2) 32.5 cm^2
- (3) 60 cm^2
- (4) 72 cm^2

Name: _____ () Class: Pr 6 ()

P6 SA1 2013

PAPER 1 (BOOKLET B)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

16 Simplify $20y + 5 + 2y - 6y \times 3$.

Ans: _____

17 Find the value of $4990 - 2910 + 90$.

Ans: _____

18 Find the value of $(19 + 2 \times 3) - 28 \div 7$.

Ans:

19 What is the missing fraction in the box?

$$93.651 = 93 + \frac{3}{5} + \boxed{?} + 0.011$$

Ans:

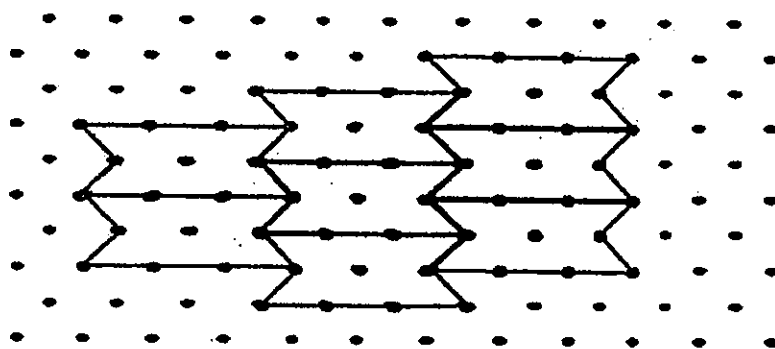
20 A total of \$2643.58 was collected from a Flag Day on Saturday. Round off this amount to the nearest ten dollar.

Ans: \$

- 21 The usual price of a watch was \$250 before GST. Geok Im bought it at 20% discount. How much did she pay for the watch inclusive of the 7% GST?

Ans: \$ _____

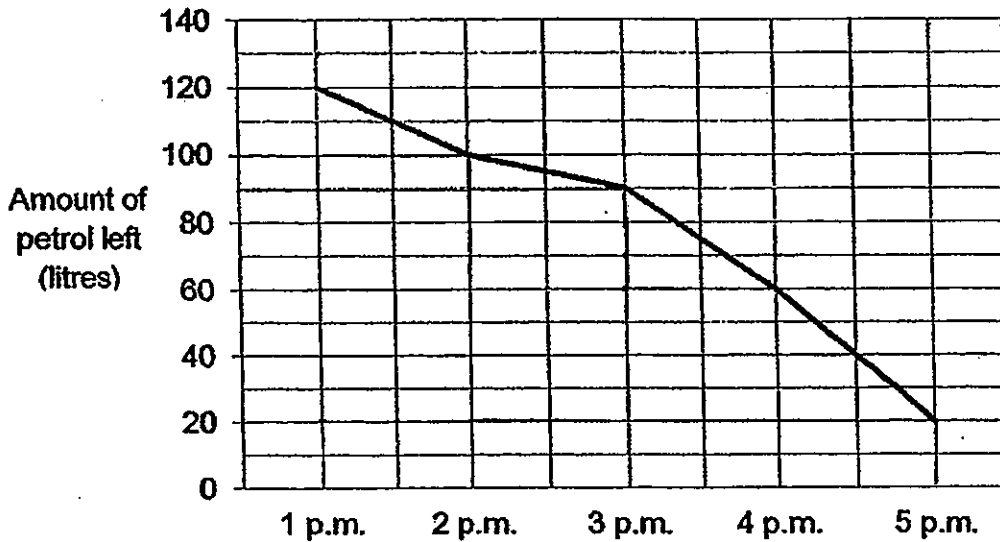
- 22 Shade a unit shape in the tessellation below.



- 23 Express 8045 g in kg.

Ans: _____ kg

- 24 The graph below shows the amount of petrol left in the tank of a lorry from 1 p.m. to 5 p.m..



How much petrol was used from 2 p.m. to 5 p.m.?

Ans: _____ l

- 25 A sum of money was shared between Gary and Ahmad in the ratio 4 : 7. Gary received \$21 less than Ahmad. Find the sum of money shared by the two children.

Ans: \$ _____

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. Marks will be awarded for relevant number sentences. For questions which require units, give your answers in the units stated.

(10 marks)

-
- 26 Mei needs twelve 250-gram packets of flour to bake cakes. Instead of buying 250-gram packets, she decides to buy 500-gram packets. How many 500-gram packets of flour does she need to buy?

Ans: _____

- 27 Pencils are sold at the following prices as shown in the table below.

Pencil	Price
1 pencil	\$0.15
A pack of 5 pencils	\$0.65
A pack of 10 pencils	\$1.20

What is the minimum amount of money that Sujata has to pay for 38 pencils?

Ans: \$ _____

- 28 A cup is $\frac{1}{3}$ filled with water. All the water from the cup is poured into an empty jug. The capacity of the jug is 4 times that of the cup. There are 10 ml of water in the jug now. How much more water is needed to fill the jug to the brim?

Ans: _____ ml

- 29 Ali cycled from his house to the library at an average speed of 16 km/h and cycled back from the library to his house at an average speed of 20 km/h. He took 27 minutes to complete the whole journey. Find the distance between Ali's house and the library.

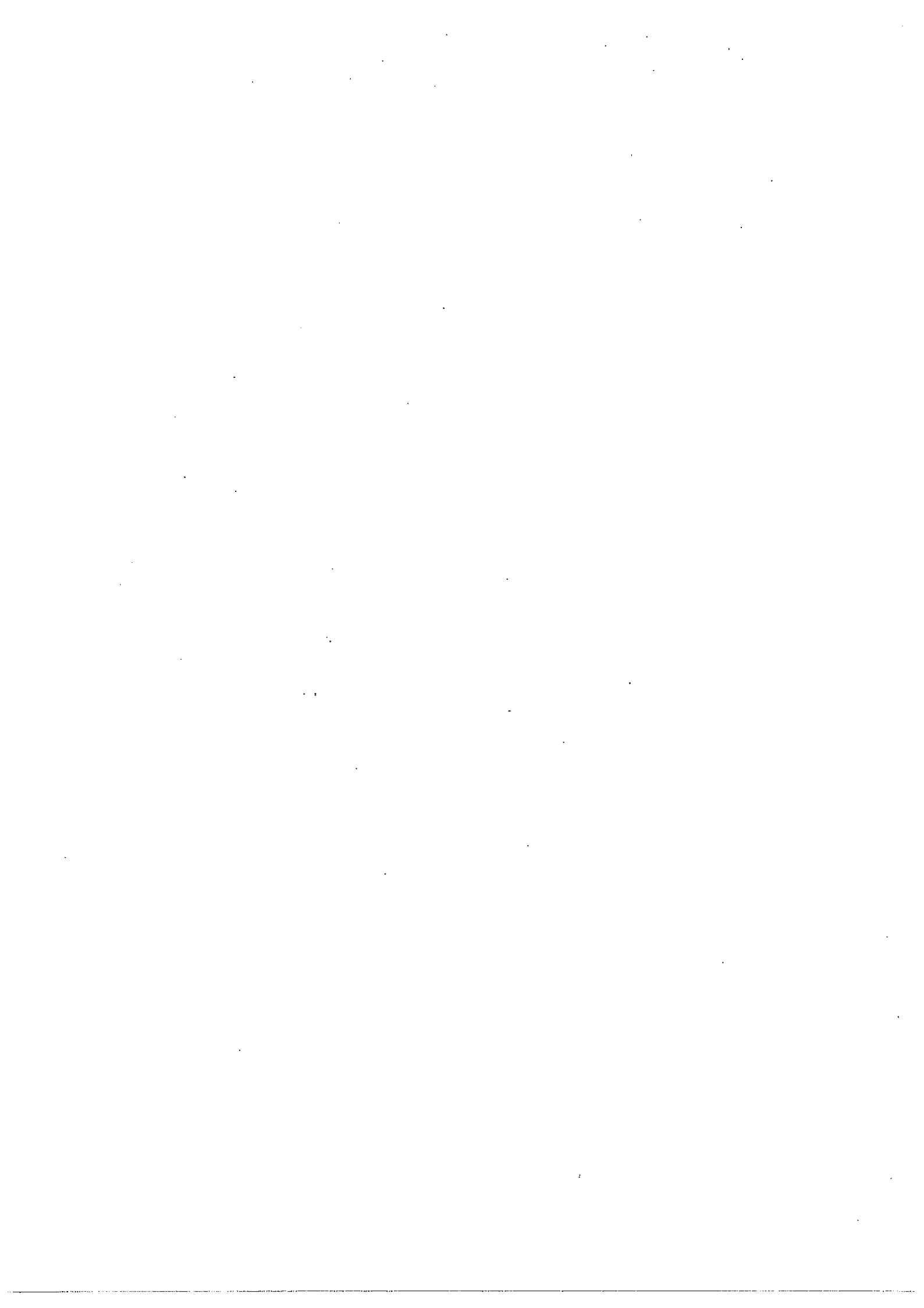
Ans: _____ km

- 30 Study the table below. The average mass of the 4 children is 50 kg. Given that the ratio of Isabelle's mass to Ranjit's mass is 11 : 10, find Meng Chuan's mass.

Name	Mass (kg)
Mary	54
Isabelle	?
Meng Chuan	?
Ranjit	50

Ans: _____ kg

*****END OF PAPER*****





NANYANG PRIMARY SCHOOL
FIRST SEMESTRAL EXAMINATION
2013

PRIMARY 6
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	/ 60
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 6 ()

Date: _____

Parent's Signature: _____

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PAPER 2

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. Marks will be awarded for relevant number sentences. For questions which require units, give your answers in the units stated.

(10 marks)

-
- 1 If $m = 2$, find the value of $28m \times 5 - 2m \times 10$.

Ans: _____

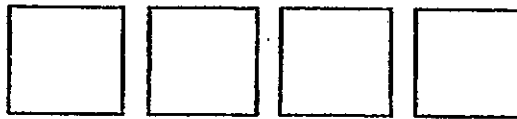
-
- 2 Mrs Boey drove at an average speed of 72 km/h from her office to her son's school in 40 minutes. How much time would she have saved when she increased her speed by 8 km/h?

Ans: _____ min

- 3 The mass of Parcel A and Parcel C are 200 g and 800 g respectively. Parcel A is 250 g lighter than Parcel B. Find the ratio of the mass of Parcel B to the total mass of Parcel A and Parcel C. Express the answer in its simplest form.

Ans: _____

- 4 A piece of steel wire, measuring 240 cm long, is used up completely to form 4 identical squares as shown below. Find the length of one side of each of the squares.



Ans: _____ cm

- 5 $\frac{4}{5}$ of Muthu's height is equal to $\frac{2}{3}$ of George's height. How many times is George as tall as Muthu?

Ans: _____

For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. Marks will be awarded for relevant number sentences. For questions which require units, give your answers in the units stated.

The number of marks available is shown in brackets [] at the end of each question or part question.

(50 marks)

- 6 The table below shows the postage charges for sending parcels to Happyland.

Mass of parcel	Postage charges
First 40 g	\$1.00
Every additional 50 g or part thereof	\$1.20

- (a) Find the postage charges for sending a parcel weighing 80 g to Happyland.
- (b) Kylar wants to send a parcel weighing 364 g to his friend in Happyland. How much must he pay for the postage?

Ans: (a) _____ [1]

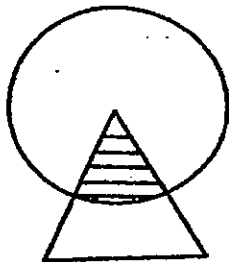
(b) _____ [2]

- 7 A van left Town E at 11 00 and travelled towards Town F. Two hours later, a car left Town E for Town F and travelled along the same route. The car passed the van at 16 00. The average speed of the car was 40 km/h faster than the van. Find the average speed of the van.

Ans:

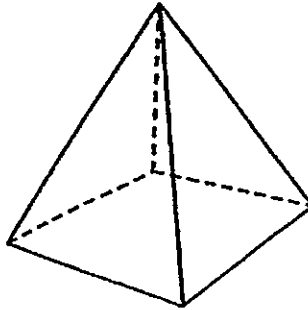
[3]

8. A triangle and a circle overlap to form the figure below. The ratio of the area of the triangle to that of the circle is 7 : 10. Given that $\frac{1}{5}$ of the circle is shaded, find the ratio of the shaded part of the figure to its unshaded part.



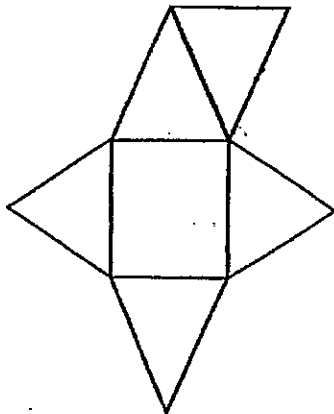
Ans: _____ [3]

- 9 (a) Study the figure shown below. How many triangular faces does it have?



- (b) In the following figure, cross out (X) the extra shape to make it the net of a solid. [1]

- (c) Name the solid that can be formed with the net obtained.



Ans: (a) _____ [1]

(c) _____ [1]

- 10 The table below shows the number of hours which some pupils spent on their homework in a week.

Number of hours spent on homework by each pupil	4	8	12	16
Number of Pupils	2	2	?	3

- (a) The total number of hours which the pupils spent on their homework in a week was 108. How many pupils spent 12 hours on their homework?
- (b) What was the average number of hours spent by each pupil in a week?

Ans: (a) _____ [2]

(b) _____ [1]

- 11 Su Lin's monthly income is \$350 less than her brother. Every month, each of them spends an equal amount of \$500 and saves the rest of their money. Su Lin saves a total of \$2100 and her brother saves a total of \$4200 after a few months. What is their total monthly income?

Ans: _____ [4]

12 Box A contains some red and blue beads. Box B contains twice as many beads as Box A. Box B contains only red beads. In Box A, the ratio of the number of red beads to the number of blue beads is 7 : 5.

(a) What fraction of the total number of beads in both boxes are blue?

(b) There are 85 more red beads in Box B than in Box A. Find the total number of beads in both boxes.

Ans: (a) _____ [2]

(b) _____ [2]

- 13 At first, 25% of Krishnan's money was the same as $33\frac{1}{3}\%$ of Jaden's money. After Jaden received \$60 from his father and Krishnan spent \$256, Jaden then had $2\frac{1}{2}$ times as much money as Krishnan
- (a) How much money did Krishnan have at first?
- (b) How much money did Jaden have in the end?

Ans: (a) _____ [2]

(b) _____ [2]

- 14 The figures below are made up of circles and rectangles. Study the figures carefully and answer the following questions.

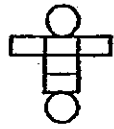


Figure 1

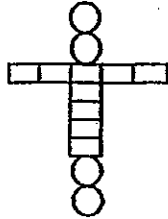


Figure 2

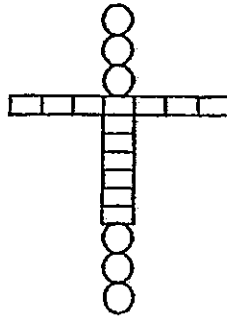


Figure 3

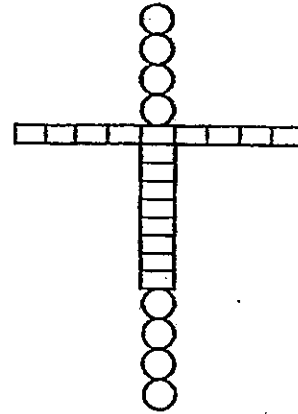


Figure 4

Figure	1	2	3	4
Number of Circles	2	4	6	8
Number of Rectangles	5	9	13	17

- (a) How many circles are needed to form Figure 14?
 (b) How many rectangles are needed to form Figure 50?
 (c) How many more rectangles than circles are there in Figure 80?

Ans: (a) _____ [1]

(b) _____ [1]

(c) _____ [2]

- 15 Figure 1 is made up of a rectangle and 2 identical isosceles triangles. The height of the triangle is equal to the breadth of the rectangle as shown in Figure 1. The length of the rectangle is 18 cm. The length of AB is 15 cm. Figure 2 is made up of 4 sets of Figure 1. The area of figure 2 is 1728 cm^2 . Find the perimeter of Figure 2.

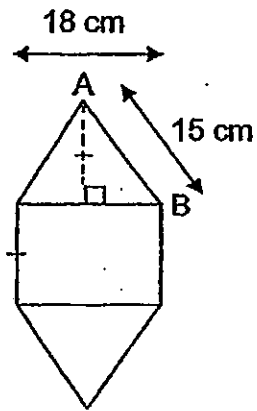


Figure 1

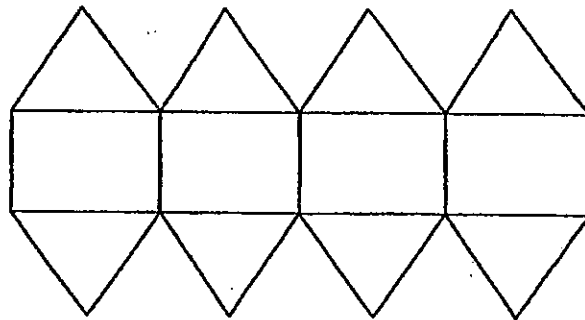


Figure 2

Ans: _____ [4]

- 16 The perimeter of a rectangle is $1\frac{5}{6}$ times the perimeter of a square. The area of the square is 225 cm^2 . The length of the rectangle is 1.2 times the breadth of the rectangle. Find the area of the rectangle.

Ans: _____ [5]

- 17 There were 2535 chicken pies and apple pies at first. More pies were baked. As a result, there was a 20% increase in the number of chicken pies and a 60% increase in the number of apple pies. The ratio of the number of chicken pies to that of apple pies then became 3 : 8. Find the number of chicken pies at first.

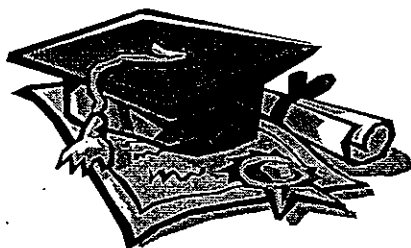
Ans: _____ [5]

18. There were some oranges and apples at a fruit stall. The ratio of the number of oranges to that of apples was 5 : 3. In the morning, $\frac{3}{7}$ of the oranges and some apples were sold. The ratio of the number of oranges to that of apples became 10 : 7. The fruit seller bought 60 oranges and 240 apples in the afternoon. In the end, the number of oranges left was the same as the number of apples left. How many apples were there at the fruit stall at first?

Ans: _____ [5]

END OF PAPER





ANSWER SHEET

EXAM PAPER 2013

SCHOOL : NANYANG

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
3	4	2	3	2	4	2	4	3	3	2	3	4	2	1

16) $4y + 5$

17) 2170

18) 21

19) $1/25$

20) \$2640

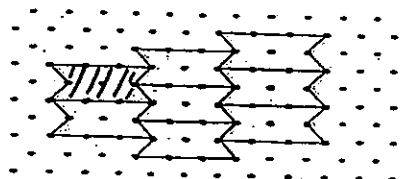
21) \$214

22)

23) 8.045kg

24) 80

25) \$77



26) 6

27) \$4.70

28) 110ml

29) 4

30) 41kg

Paper 2

1) $140m - 20m = 120m$
 $120 \times 2 = 240$

2) $40/100 = 2/3$
 $72 \times 2/3 = 48$
 $48 \div 80 = 3/5$
 $= 36/60$
 $40 - 36 = 4 \text{ min}$

$$\begin{aligned} 3) & 200 + 250 = 450 \\ & 200 + 800 = 1000 \\ & 450 : 1000 \\ & = 9 : 20 \end{aligned}$$

$$\begin{aligned} 4) & 4 \times 4 = 16 \\ & 240 \div 16 = 15\text{cm} \end{aligned}$$

$$\begin{aligned} 5) & \text{GH} : \text{MH} \\ & 6 : 5 \end{aligned}$$

$$\begin{aligned} & 6/5 - 11/5 \\ & = 11/5 \end{aligned}$$

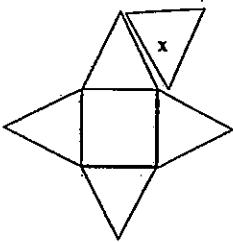
$$\begin{aligned} 6) \text{a)} & \$1.00 + \$1.20 = \$2.20 \\ \text{b)} & 364 - 40 = 324 \\ & 324 \div 50 \approx 7 \\ & \$1.00 + \$1.20 \times 2 = \$9.40 \end{aligned}$$

$$\begin{aligned} 7) & \text{T}(1) : \text{T}(2) \\ & 5 : 3 \end{aligned}$$

$$\begin{aligned} & \text{S}(1) : \text{S}(2) \\ & 3 : 5 \\ \text{Diff} & \rightarrow 2\text{units} \rightarrow 40 \\ & 1\text{unit} \rightarrow 20 \\ & 3\text{units} \rightarrow 60\text{km/h} \end{aligned}$$

$$8) 2 : 13$$

$$\begin{aligned} 9) & \text{a)} 4 \\ & \text{b)} \end{aligned}$$



c) pyramid

10)a) $4 \times 2 = 8$

$8 \times 2 = 16$

$16 \times 3 = 48$

$48 + 16 + 8 = 72$

$108 - 72 = 36$

$36 \div 12 = 3$

b) $3 + 2 + 2 + 3 = 10$

$108 \div 10 = 10\frac{4}{5}h$

11) $\$4200 - \$2100 = \$2100$

$\$2100 \div \$350 = 6$

$\$4200 \div 6 = \700

$\$700 + \$500 = \$1200$

$\$1200 - \$350 = \$850$

$\$850 + \$1200 = \$2050$

12)a) $7u + 5u = 12u$

$12u \times 2 = 24u$

$24u + 12u = 36u$

$5 \div 36 = 5/36$

b) $24u - 7u = 17u$

$85 \div 17 = 5$

$5 \times 36 = 180$

13)a) 400

b) 360

14)a) $14 \times 2 = 28$

b) $50 \times 2 = 100$

$100 \times 2 + 1 = 201$

c) $80 \times 2 = 160$

$160 \times 2 + 1 = 321$

$321 - 160 = 161$

15) $1728 \div 4 = 432$

$432 \div 2 = 216$

$216 \div 18 = 12$

$16 \times 15 = 240$

$240 + 24 = 264cm$

$$16) \sqrt{225} = 15$$

$$(15+15) \times 2 = 60$$

$$60 \times 15/6 = 110$$

$$110 \div 2 = 55$$

$$55 \div 2.3 = 25$$

$$25 \times 1.2 = 30$$

$$25 \times 30 = 750\text{cm}^2$$

$$17) L : A$$

$$3 : 8 - \text{units (u)}$$

$$2\frac{1}{2} : 5$$

$$= 1 : 2 - \text{parts (p)}$$

$$3p \rightarrow 2535$$

$$1p \rightarrow 845$$

$$120 \rightarrow 3$$

$$20 \rightarrow \frac{1}{2}$$

$$100 \rightarrow 2\frac{1}{2}$$

$$160 \rightarrow 8$$

$$20 \rightarrow 1$$

$$100 \rightarrow 5$$

$$18) 240 - 60 = 180$$

$$3\text{units} \rightarrow 180$$

$$1\text{unit} \rightarrow 60$$

$$7\text{units} \rightarrow 420$$

$$10\text{units} \rightarrow 600$$

$$4/7 \rightarrow 600$$

$$1/7 \rightarrow 150$$

$$7/7 \rightarrow 1050$$

$$5\text{ parts} \rightarrow 1050$$

$$1\text{ part} \rightarrow 210$$

$$3\text{parts} \rightarrow 630$$



**RAFFLES GIRLS' PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1
MATHEMATICS (PAPER 1)
PRIMARY 6**

Name: _____ ()

Form Class: P6 _____

Banded Math Class: P6 _____

Date: 9 May 2013

Duration: 50 min

Your Score	
Paper 1 (Out of 40 marks)	
Paper 2 (Out of 60 marks)	
Overall (Out of 100 marks)	

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. **NO** calculator is allowed for this paper.

SECTION A (20 marks)

Questions 1 to 10 carry 1 mark each. Question 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer (1, 2, 3 or 4) on the OAS provided. All diagrams are not drawn to scale.

1. In 691 400, the value of the digit 9 is _____.

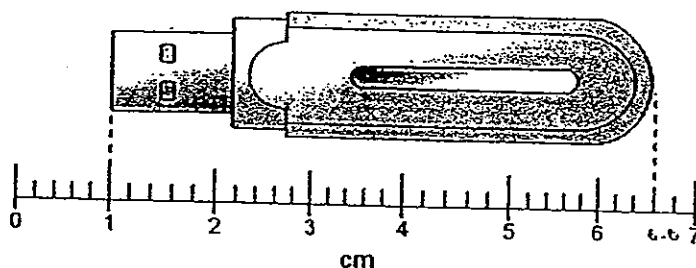
- (1) 90
- (2) 900
- (3) 9 000
- (4) 90 000

2. Arrange the following fractions in ascending order.

$$\frac{4}{7}, \frac{1}{4}, \frac{5}{11}$$

- (1) $\frac{5}{11}, \frac{4}{7}, \frac{1}{4}$
- (2) $\frac{4}{7}, \frac{5}{11}, \frac{1}{4}$
- (3) $\frac{1}{4}, \frac{4}{7}, \frac{5}{11}$
- (4) $\frac{1}{4}, \frac{5}{11}, \frac{4}{7}$

3. What is the length of the thumb drive as shown in the figure below?



- (1) 5.3 cm
- (2) 5.6 cm
- (3) 6.3 cm
- (4) 6.6 cm

4. The cost of sending a parcel overseas is $\$(0.02p + 8)$, where p is the mass of the parcel in grams. What is the cost of sending a parcel that weighs 500g?

- (1) \$8.10
- (2) \$10
- (3) \$10.80
- (4) \$18

5. In a class of 40 pupils, 21 pupils were boys.

What was the ratio of the number of boys to the number of girls?

- (1) 19 : 21
- (2) 19 : 40
- (3) 21 : 19
- (4) 21 : 40

6. Which of the following fractions is smaller than $2\frac{1}{3}$?

(1) $\frac{8}{3}$

(2) $\frac{15}{6}$

(3) $\frac{21}{9}$

(4) $\frac{27}{12}$

7. Express $1\frac{3}{4}$ as a decimal.

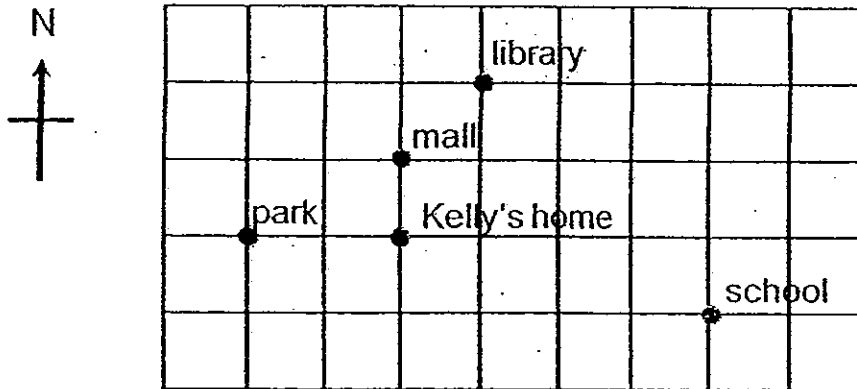
(1) 1.75

(2) 1.68

(3) 1.60

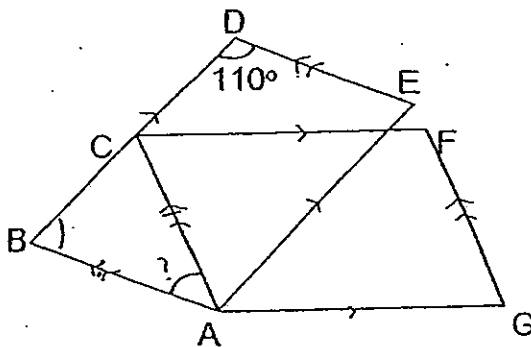
(4) 1.34

8. Study the diagram below. Which of the following statements is correct?



- (1) The mall is west of the park.
- (2) The library is north of Kelly's home.
- (3) The school is north-east of the library.
- (4) Kelly's home is south-west of the library.

9. The figure below shows 2 identical parallelograms, ABDE and ACFG. BCD is a straight line and $\angle BDE$ is 110° . Find $\angle CAB$.



- (1) 35°
- (2) 40°
- (3) 55°
- (4) 70°

10. Express 2.4 m as a percentage of 60 cm.

(1) 2500%

(2) 400%

(3) 25%

(4) 4%

11. At first, there were 95 apples and oranges altogether at the fruit store.

After $\frac{1}{4}$ of the apples and 15 of the oranges were sold, there were thrice as many apples as oranges left. How many more apples than oranges were sold?

(1) 1

(2) 16

(3) 31

(4) 4

12. 2 tens, 3 hundredths and 4 thousandths is _____.

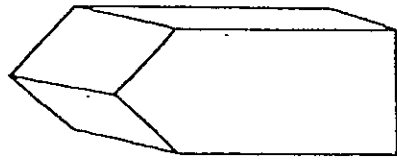
(1) 20.034

(2) 20.340

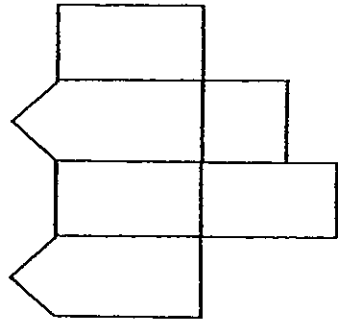
(3) 23.004

(4) 23.040

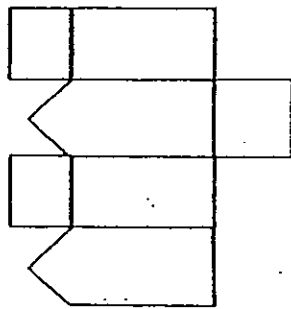
13. Identify the correct net for the figure shown below.



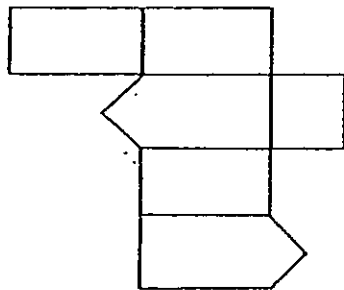
(1)



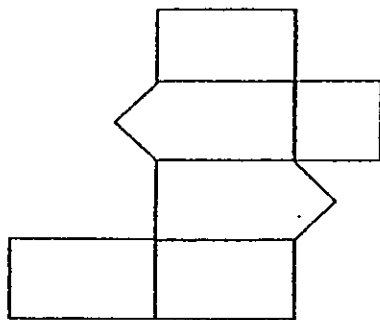
(2)



(3)



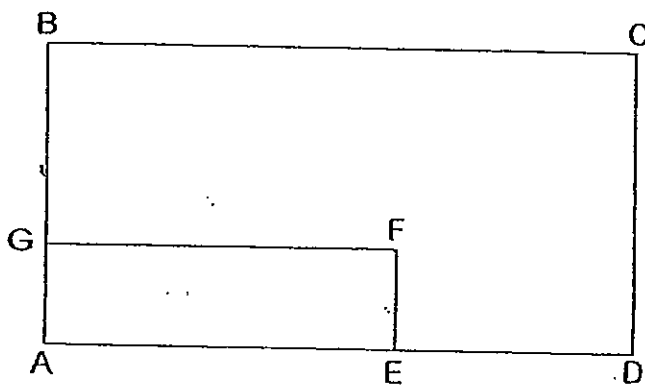
(4)



14. Kenny always spends 80% of his allowance and saves the rest. If he increases his spending by 10%, his spending will increase by \$16. How much is Kenny's allowance?

- (1) \$40
- (2) \$160
- (3) \$200
- (4) \$8000

15. The figure below is made up of 2 rectangles.



The ratio of the length $AE : AD$ is $3 : 5$ and the length of $AG : AB$ is $1 : 3$.
 What is the ratio of the area of rectangle AGFE to the area of rectangle ABCD?

- (1) 1 : 2
- (2) 2 : 1
- (3) 1 : 5
- (4) 5 : 1

()

SECTION B (20 marks)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form. .

16. What is the difference between the largest and smallest possible 4-digit whole numbers that can be formed using the digits 4, 3, 9, 1?

For each number, each digit can only be used once.

Ans: _____

17. Find the value of $100 - 20 \div 2 \times 4$.

Ans: _____

18. Alicia made 48 cupcakes. She gave away $\frac{3}{8}$ of them.
How many cupcakes had she left?

Ans: _____

19. Find the value of $\frac{3}{4} + \frac{5}{6}$ Express the answer as a mixed number in the simplest form.

Ans: _____

20. Express $3\frac{1}{40}$ as a decimal.

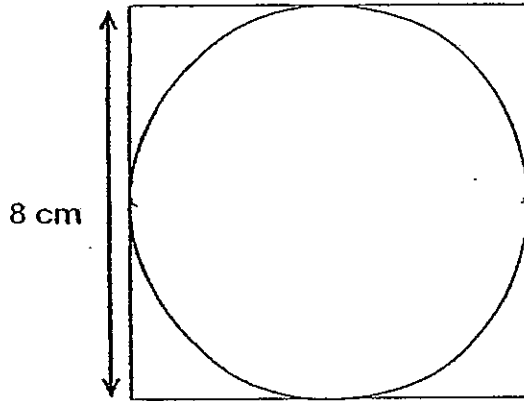
Ans: _____

21. What is 4 km 4 m in kilometres?

Ans: _____ km

22. The figure below is made up of a square and a circle.

Find the circumference of the circle. (Take π as 3.14)



Ans: _____ cm

23. Miss Lim bought 6 pizzas. $\frac{2}{3}$ of the pizzas were shared by 4 girls equally.
What fraction of all the pizzas did each girl receive?

Ans: _____

24. The table below shows record of Megan's mass over 4 months.

	September	October	November	December	Average
Mass	62 kg	55 kg	?	58 kg	57 kg

What was Megan's mass for November?

Ans: _____ kg

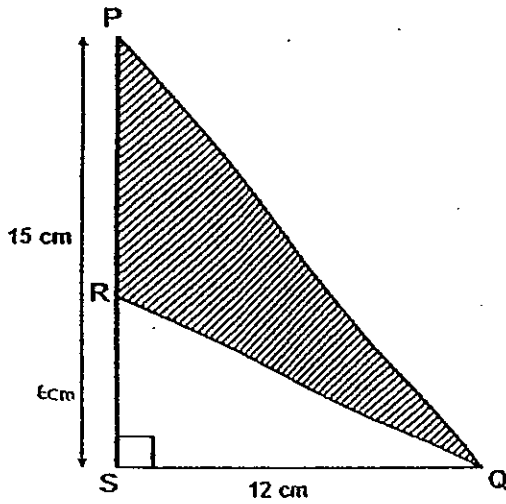
25. Mr and Mrs Tan watched a performance which was 1 hour and 35 minutes long. It ended at 9.20 p.m..

What time did the performance start? Give your answer in 12-hour clock.

Ans: _____

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the space provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form.

26. In the figure below, PRS is a straight line and SQ is twice as long as RS. What is the area of triangle PQR?



Ans: _____ cm²

27. Find the sum of all the whole numbers from 1 to 120.

Ans: _____

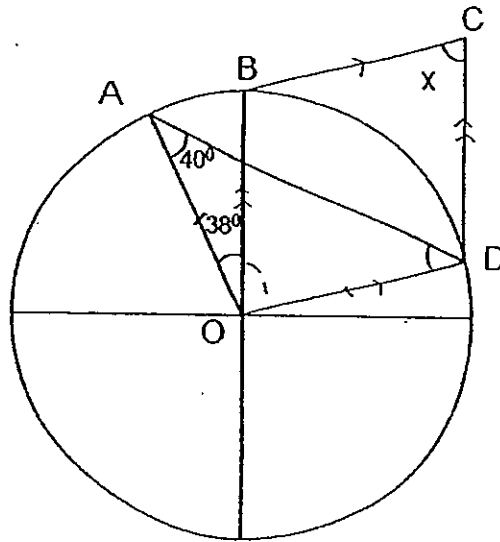
28. Betty is $(5y + 1)$ years old. Abby is 4 years older. What will be their total age in 6 years' time?

Ans: _____ years old

29. At a supermarket, the oranges were either sold at 55 cents each or in bags of 4 at \$2 per bag. Miss Tan bought exactly 35 oranges. What was the least amount of money Miss Tan spent on the oranges?

Ans: \$ _____

30. In the figure shown below, OBCD is a rhombus and O is the centre of the circle. Given $\angle AOB$ is 38° and $\angle OAD$ is 40° , find $\angle x$.



Ans: _____ °

End of Paper-
 ☺ Please check your work carefully ☺

Setters: Mrs. Jacqueline Seto
 Mr. Ho Kai Huat
 Mr. Ronald Lee



**RAFFLES GIRLS' PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1
MATHEMATICS (PAPER 2)
PRIMARY 6**

Name: _____ ()

Form class: P6 _____

Banded Math Class: P6 _____

Date: 9 May 2013

Duration: 1 h 40 min

Your Score (Out of 60 marks)	
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INSTRUCTIONS TO CANDIDATES

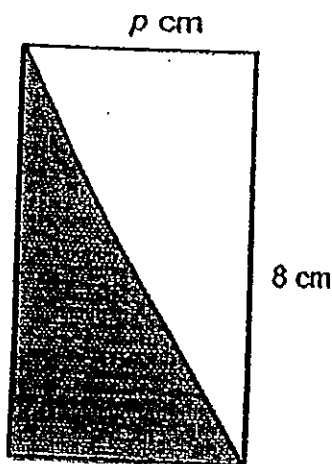
1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. The use of calculator is allowed for this paper.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. Figures are not drawn to scale. For questions which require units, give your answers in the units stated. (10 marks)

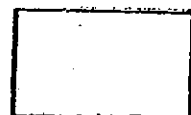
1. Alicia bought some marbles from a shop.
The number of red marbles is thrice as many as the number of blue marbles.
The number of blue marbles is twice as many as the number of green marbles.
What is the ratio of the number of red marbles to the number of green marbles?

Ans: _____ [2]

2. Find the area of the shaded part.



Ans: _____ cm^2 [2]



3. Eddy takes $\frac{1}{3}$ hour to walk to his school at an average speed of 4.5 km/h. If he increases his speed by 1.5 km/h, how long will he take to walk to school?

Ans: _____ h [2]

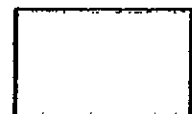
4. A baker decorated 6 identical cakes with 72 strawberries.
How many cakes could he decorate with 180 strawberries?

Ans: _____ [2]



5. The price of a leather sofa, inclusive of 7% GST, is \$1618.91.
What is the price of the leather sofa before GST?

Ans: \$ _____ [2]



For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. Figures are not drawn to scale. The number of marks available is shown in the brackets [] at the end of each question or part-question. (50 marks)

6. At first, Jolly had $\frac{5}{8}$ of the number of stickers Kelly had. When Kelly gave 36 stickers to Jolly, both had the same number of stickers.

- (a) How many more stickers did Kelly have than Jolly at first?
(b) How many stickers were there altogether?

Ans: (a) _____ [1]

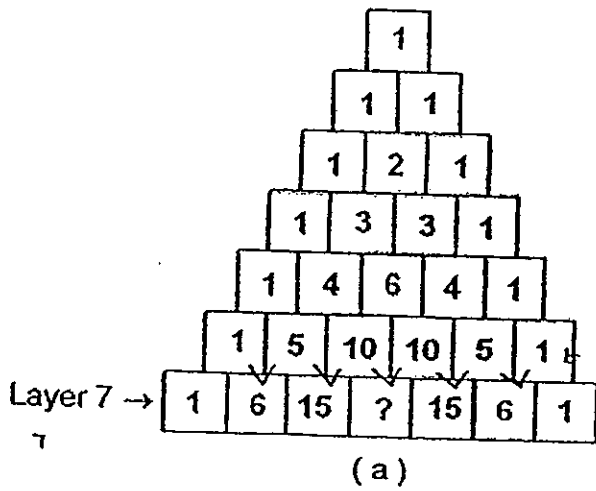
(b) _____ [2]

7. Gillian had 3 types of coins, 10¢, 20¢ and 50¢. The ratio of the number of 10¢ coins to the number of 20¢ coins to the number of 50¢ coins is 2 : 5 : n .
If the value of all her 10¢ coins is \$12, express the number of 50¢ coins she had in terms of n .

Ans: _____ [3]



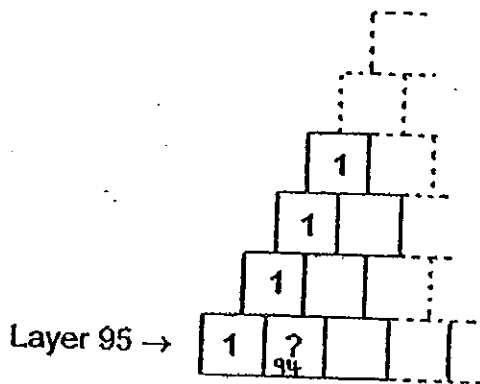
8. The number patterns below shows the top 7 layers of a pyramid.



a) What is the missing number in Layer 7?

(b) How many numbers are there in Layer 25?

(c) The figure below shows part of the pyramid with Layer 95.

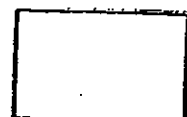


What is the second number in Layer 95?

Ans: (a) _____ [1]

(b) _____ [1]

(c) _____ [1]

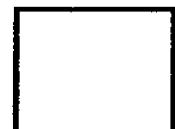


9. Adeline went shopping with a sum of money. She spent all of her money in 2 stores. In each store, she spent \$18 more than half of what she had when she entered the store.

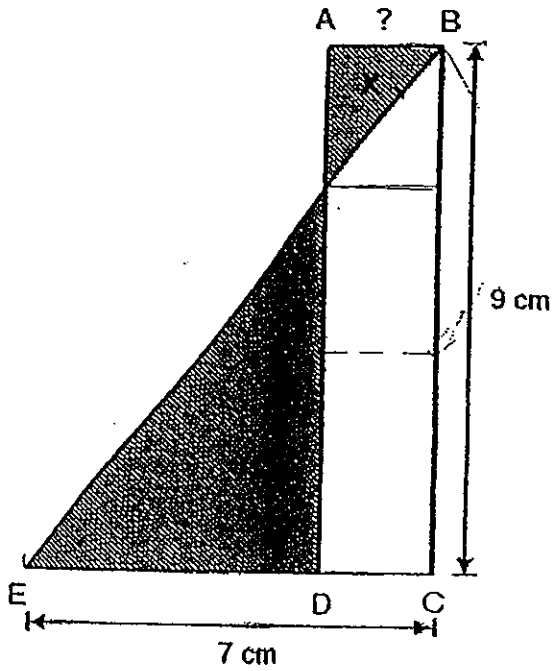
- (a) How much did she spend at the second store?
- (b) How much money did she have at first?

Ans: (a) _____ [1]

(b) _____ [2]



10. In the figure, ABCD is a rectangle and BCE is a triangle.
 $BC = 9\text{ cm}$ and $CE = 7\text{ cm}$. Shaded area X is 13.5 cm^2 smaller than shaded area Y.
 What is the length of AB?



Ans: _____ [3]



11. Jane bought a total of 55 cupcakes and mini buns for a party.
Each cupcake cost \$3.60 and each mini bun cost \$1.40.
Jane spent a total of \$151.80. How many cupcakes did Jane buy?

Ans: _____ [4]

12. $\frac{3}{5}$ of the pupils at a camp were girls. After 12 girls and 4 boys left the camp, the ratio of the number of girls to the number of boys became 4 : 3.
How many pupils were at the camp at first?

Ans: _____ [4]



13. Sue spent \$153.15 on some key chains and bookmarks at a gift shop.
A bookmark cost \$3.80 and a key chain cost \$5.35.
Sue bought 9 fewer key chains than bookmarks.
How many key chains and bookmarks did she buy altogether?

Ans: _____ [4]



14. At 8.30 a.m., a motorcycle left Town A for Town B travelling at 60 km/h.

$1\frac{1}{2}$ hour later, a car left Town A travelling at 85 km/h.

The car overtook the motorcycle midway between Town A and Town B, and reached Town B first.

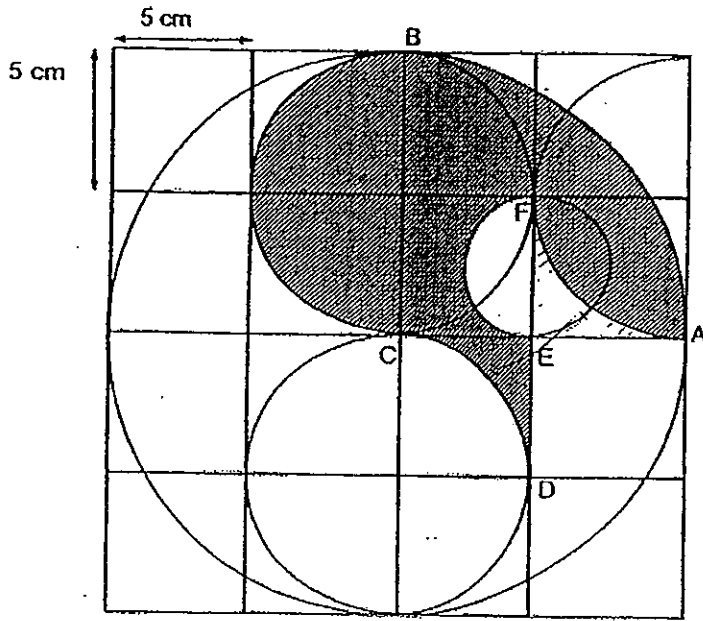
- (a) Find the distance covered by the motorcycle when the car left Town A.
- (b) What was the distance between Town A & Town B?

Ans: (a) _____ [1]

(b) _____ [3]



15. Look at the figure below. Find the total area of the shaded parts. Give your answer correct to 2 decimal places.



Ans: _____ [5]



16. 40% of the people who joined a newly opened fitness club were female.
After one year, the number of female members decreased by 20% and the number of male members increased by 45%.
In the end, the fitness club had 228 more members than a year ago.
What was the difference between the number of male and female members at first?

Ans: _____ [4]



17. At a shop, $\frac{3}{10}$ of the fruits are papayas, $\frac{3}{5}$ of the remainder are durians and the rest are mangoes. There are 105 more durians than mangoes.

After selling $\frac{2}{5}$ of the papayas, how many fruits are left?

Ans: _____ [5]

18. Betty had 3440 red, yellow and blue beads. The number of red and yellow beads that Betty had was equal.

After using only some yellow and blue beads to make a necklace, she had $\frac{5}{7}$ of yellow beads and $\frac{3}{5}$ of blue beads left.

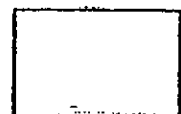
Given that the number of beads left was 2820, how many blue beads did she have at first?

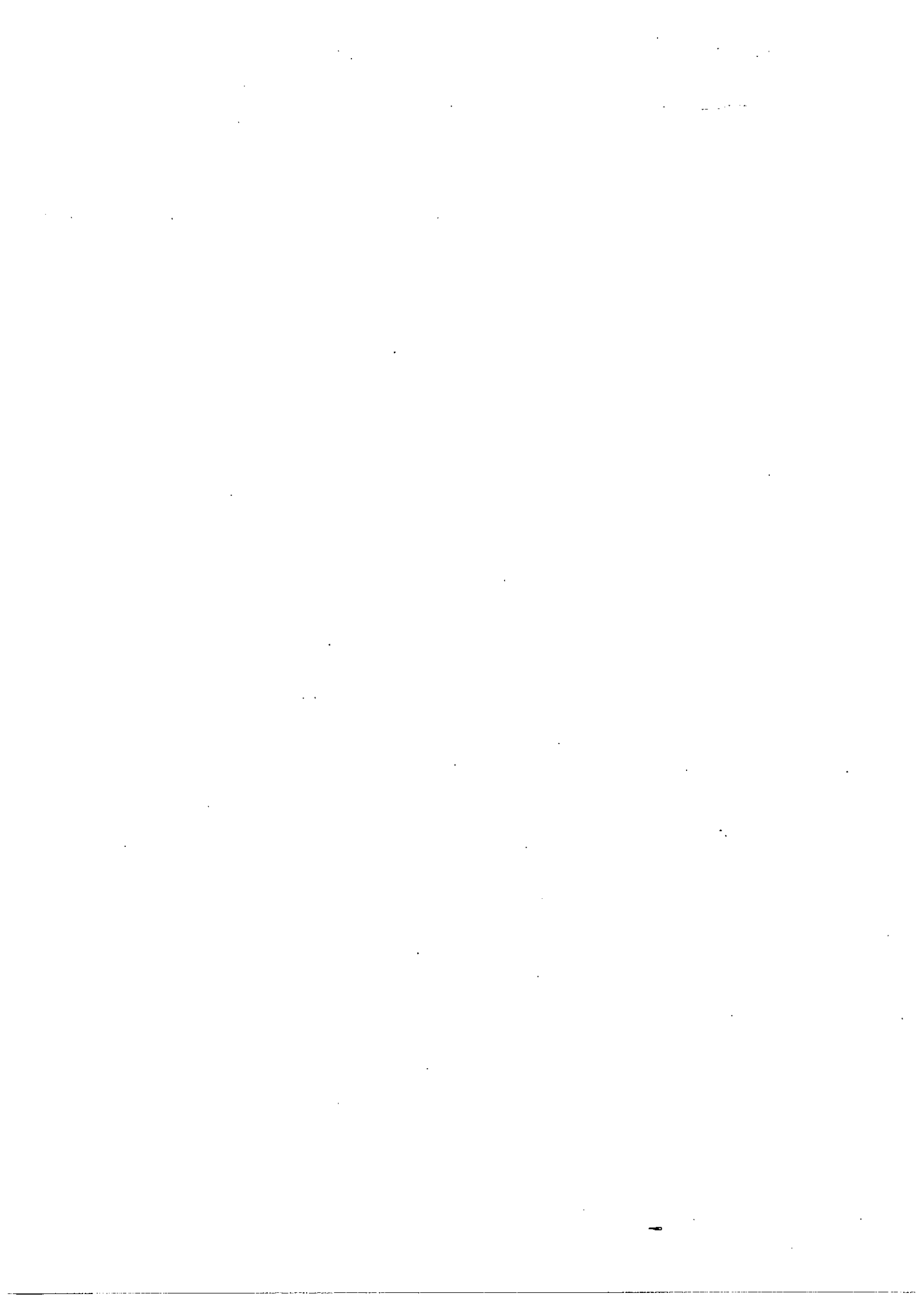
Ans: _____ [5]

-End of Paper-

Please check your work carefully ☺

Setters: Mrs. Jacqueline Seto
Mr. Ho Kai Huat
Mr. Ronald Lee





Exam Paper 2013 Answer Sheet

School: RAFFLES GIRLS' PRIMARY SCHOOL

Subject: PRIMARY 6 MATHEMATICS

Term: SA1

Paper 1

1)	4	6)	4	11)	1
2)	4	7)	1	12)	1
3)	2	8)	4	13)	2
4)	4	9)	2	14)	3
5)	3	10)	2	15)	3

16. 8082

17. 60

18. 30

19. $1\frac{7}{12}$

20. 3.025

21. 4.004

22. 25.12

23. $\frac{1}{6}$

24. 53

25. 7.45 p.m.

26. $12 \text{ cm} \div 2 = 6 \text{ cm}$
 $15 \text{ cm} - 6 \text{ cm} = 9 \text{ cm}$
 $\frac{1}{2} \times 9 \text{ cm} \times 12 \text{ cm} = 54 \text{ cm}^2$

27. $120 + 1 = 121$
 $121 \times 60 = 7260$

28. $B \rightarrow 5y + 1$
 $A \rightarrow 5y + 1 + 4 = 5y + 5$
 $B + A \rightarrow 5y + 1 + 5y + 5 = 10y + 6$
 $10y + 6 + 6 + 6 = (10y + 18) \text{ years old}$

29. $35 \div 4 = 8\text{R}3$
 $8 \times \$2 = \16
 $3 \times 55\text{¢} = \$1.65$

$$\$1.65 + \$16 = \$17.65$$

$$30. 180^\circ - 40^\circ - 40^\circ - 38^\circ = 62^\circ$$

Paper 2

1. R : B : G

$$3 : 1$$

$$6 : 2 : 1$$

Answer: **6: 1**

2. $\frac{1}{2} \times p \times 8 = 4p \text{ cm}^2$

3. $4.5 \text{ km/h} \times \frac{1}{3} \text{ h} = 1.5 \text{ km}$

$$4.5 \text{ km/h} + 1.5 \text{ km/h} = 6 \text{ km/h}$$

$$1.5 \text{ km} \div 6 \text{ km/h} = \frac{1}{4} \text{ h}$$

4. 6 cakes \rightarrow 72

$$1 \text{ cake} \rightarrow 72 \div 6 = 12$$

$$180 \div 12 = 15$$

5. 107% \rightarrow \$1618.91

$$1\% \rightarrow \frac{\$1618.91}{107}$$

$$100\% \rightarrow \frac{\$1618.91}{107} \times 100 = \mathbf{\$1513}$$

6. (a) $3u \rightarrow 36$

$$6u \rightarrow 36 \times 2 = 72$$

(b) $1u \rightarrow 36 \div 3 = 12$

$$26u \rightarrow 12 \times 26 = 312$$

7. $\$12 \div 10\phi = 120$

$$2u \rightarrow 120$$

$$1u \rightarrow 120 \div 2 = 60$$

$$n \times 60 = 60n$$

8. (a) 20

(b) 25

(c) $95 - 1 = 94$

9. (a) $\$18 \times 2 = \36

(b) $\$36 + \$18 = \$54$

$$\$54 \times 2 = \mathbf{\$108}$$

10. $\frac{1}{2} \times 7 \text{ cm} \times 9 \text{ cm} = 31.5 \text{ cm}^2$

$$31.5 \text{ cm}^2 - 13.5 \text{ cm}^2 = 18 \text{ cm}^2$$

$$18 \text{ cm}^2 \div 9 \text{ cm} = \mathbf{2 \text{ cm}}$$

$$\begin{aligned}
11. & 55 \times \$1.40 = \$77 \\
& \$151.80 - \$7 = \$74.80 \\
& \$3.60 - \$1.40 = \$2.20 \\
& \$74.80 \div \$2.20 = 34
\end{aligned}$$

$$\begin{aligned}
12. & 3 \times (3u - 12) = 4 \times (2u - 4) \\
& 9u - 36 = 8u - 16 \\
& 9u - 8u = 36 - 16 \\
& 1u = 20 \\
& 5u = 20 \times 5 \\
& = 100
\end{aligned}$$

$$\begin{aligned}
13. & \$5.35 \times 9 = \$48.15 \\
& \$153.15 + \$48.15 = \$201.30 \\
& \$3.80 + \$5.35 = \$9.15 \\
& \$201.30 \div \$9.15 = 22 \\
& 22 - 9 = 13 \\
& 22 + 13 = 35
\end{aligned}$$

$$\begin{aligned}
14. & \text{(a) M : C} \\
& 12 : 17 \text{ (Speed)} \\
& 12 : 17 \text{ (Distance)} \\
& 60 \text{ km/h} \times 1\frac{1}{2} \text{ h} = 90 \text{ km}
\end{aligned}$$

$$\begin{aligned}
& \text{(b) } 5u \rightarrow 90 \text{ km} \\
& 1u \rightarrow 90 \text{ km} \div 5 = 18 \text{ km} \\
& 34u \rightarrow 18 \text{ km} \times 34 = 612 \text{ km}
\end{aligned}$$

$$\begin{aligned}
15. & \frac{1}{4} \times \pi \times 10 \times 10 = 25\pi \\
& \frac{1}{2} \times \pi \times 2.5 \times 2.5 = 3.125\pi \\
& \frac{1}{2} \times \pi \times 5 \times 5 = 12.5\pi \\
& 25\pi - 3.125\pi + 12.5\pi \approx 107.99 \text{ cm}^2
\end{aligned}$$

$$\begin{aligned}
16. & \text{ F : M} \\
& 4 : 6 \\
& 40 : 60 \\
& 32u : 87u \\
& 87u + 32u = 119u \\
& 119u - 40u - 60u = 19u \\
& 19u \rightarrow 228 \\
& 1u \rightarrow \frac{228}{19} \\
& 60u - 40u = 20u \\
& 20u \rightarrow \frac{228}{19} \times 20 = 240
\end{aligned}$$

$$\begin{aligned}
17. & \text{ P : O} \\
& 3 : 7 \\
& 15 : 35
\end{aligned}$$

$$\begin{aligned}
& \text{ D : M} \\
& 3 : 2
\end{aligned}$$

$$21 : 14$$

$$21u - 14u = 7u$$

$$7u \rightarrow 105$$

$$50u \rightarrow \frac{105}{7} \times 50 = 750$$

$$21u \rightarrow \frac{105}{7} \times 21 = 315 \text{ (Durian)}$$

$$15u \rightarrow \frac{105}{7} \times 15 = 225$$

$$\frac{2}{5} \times 225 = 90$$

$$750 - 90 = 660$$

$$18. 14u + 5p \rightarrow 3440$$

$$168u + 60p \rightarrow 3440 \times 12 = 41280$$

$$12u + 3p \rightarrow 2820$$

$$168u + 42p \rightarrow 2820 \times 14 = 39480$$

$$60p - 42p = 41280 - 39480$$

$$18p = 1800$$

$$1p = 100$$

$$5p = 100 \times 5$$

$$= 500$$



Rosyth School
Semestral Assessment 1 Examination 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 14 May 2013 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet A)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Shade your answers in the Optical Answer Sheet (OAS) provided.
4. You are **not** allowed to use a calculator
5. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet A)	20	

*** This booklet consists of 6 pages (including this cover page)**

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Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1. Arrange the following fractions from the smallest to the largest.

$$\frac{7}{10}, \frac{1}{12}, \frac{2}{5}$$

(1) $\frac{1}{12}, \frac{2}{5}, \frac{7}{10}$

(2) $\frac{2}{5}, \frac{1}{12}, \frac{7}{10}$

(3) $\frac{1}{12}, \frac{7}{10}, \frac{2}{5}$

(4) $\frac{2}{5}, \frac{7}{10}, \frac{1}{12}$

2. Which one of the following is the best estimate of $26.124 \div 87$?

(1) 0.03

(2) 0.3

(3) 3

(4) 30

3. 5 hundreds, 8 tenths and 9 thousandths is _____.

(1) 580.009

(2) 500.980

(3) 500.809

(4) 500.089

4. Which of the following can be divided by 3 and gives a remainder of 1?

- (1) 1 056
- (2) 2 081
- (3) 3 024
- (4) 4 540

5. Kelly saved \$ n every week for the past eight weeks. This week, she saves \$2 less than last week. How much did she save altogether?

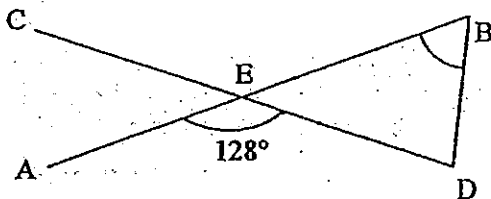
- (1) \$ $6n$
- (2) \$ $(8n - 2)$
- (3) \$ $(9n - 2)$
- (4) \$ $(9n + 2)$

6. Which one of the following is the same as 4 020 g?

- (1) 4 kg 2 g
- (2) 4 kg 20 g
- (3) 40 kg 2 g
- (4) 40 kg 20 g

7. The figure below is not drawn to scale. AB and CD are straight lines. $EB = ED$.

Find $\angle EBD$.



- (1) 26°
- (2) 52°
- (3) 64°
- (4) 128°

8. Mr Teo saved \$200 from his salary every month.

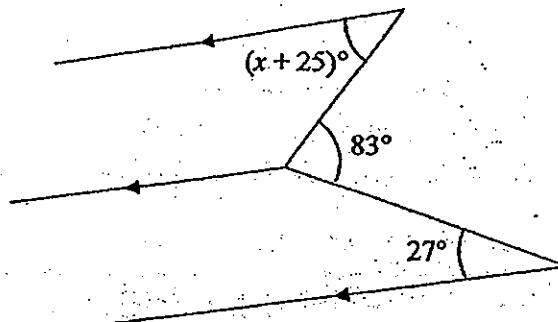
How much would he have saved $3\frac{1}{4}$ years later?

- (1) \$650
- (2) \$2 400
- (3) \$7 200
- (4) \$7 800

9. Meili started doing her homework at 8.45 a.m. She took an hour lunch break 3 hours later. After that, she continued doing her work for another $2\frac{1}{2}$ hours. What time did she stop doing her work?

- (1) 2.15 p.m.
- (2) 2.45 p.m.
- (3) 3.15 p.m.
- (4) 4.15 p.m.

10. The diagram below is not drawn to scale. Find the value of x .



- (1) 27°
- (2) 31°
- (3) 56°
- (4) 58°

11. Julian used $\frac{1}{4}$ of his money as downpayment on a new bicycle, $\frac{3}{8}$ of it on a camera and $\frac{1}{3}$ of the remainder on shoes and a watch. The cost of the watch was \$110 and the shoes cost \$80 more than the watch. How much was the downpayment on the bicycle?

- (1) \$600
- (2) \$800
- (3) \$1 600
- (4) \$2 400

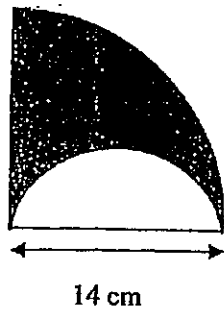
12. A food caterer charges \$11 for meals delivered on time and \$7 for meals delivered late. In April, the company collected \$8 400. For every 12 meals delivered, 3 were delivered late. What was the total number of meals delivered late?

- (1) 70
- (2) 210
- (3) 3
- (4) 630

13. Mr Ramy saved 20% of his salary every month. He donated 50% of his savings to charity. If he donated \$600 each month, what was his monthly salary?

- (1) \$1 200
- (2) \$2 000
- (3) \$3 000
- (4) \$6 000

14. The figure below is not drawn to scale. It is made up of a quarter circle and a semi-circle. Find the perimeter of the shaded part in terms of π .



- (1) $(3.5\pi + 14)$ cm
(2) 10.5π cm
(3) 14π cm
(4) $(14\pi + 14)$ cm
15. Jasmine and Taufik took part in a race. When Taufik had completed $\frac{1}{3}$ of the race in 15 minutes, Jasmine had ran $\frac{3}{4}$ of the race. Jasmine's average speed for the race was 40 m/min more than Taufik. Find the distance of the race.
- (1) 600 m
(2) 800 m
(3) 1 440 m
(4) 1 800 m



Rosyth School
Semestral Assessment 1 Examination 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6

Date: 14 May 2013 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet B)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. You are not allowed to use a calculator
4. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

*** This booklet consists of 8 pages (including this cover page)**

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Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

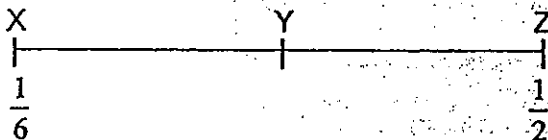
16. Find the sum of 41, 3.7 and 6.03.

Ans: _____

17. Lily bought 6 litres of juice. She finished $\frac{5}{12}$ of the juice. How many millilitres of juice had she left?

Ans: _____ ml

In the number line below, X represents $\frac{1}{6}$, Z represents $\frac{1}{2}$ and $XY = YZ$. What fraction is represented by Y? Leave your answer as a fraction in the simplest form.



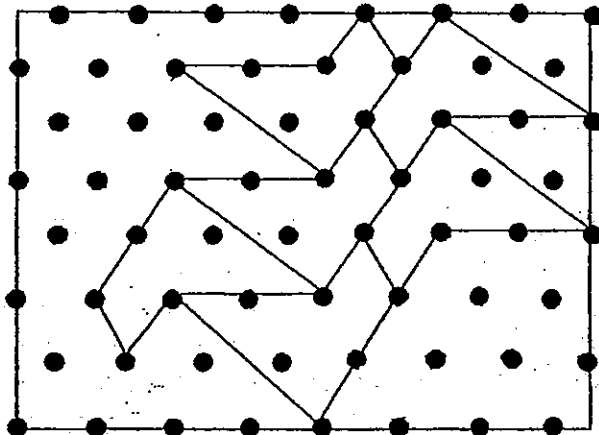
Ans: _____

19. The average of the 4 numbers shown below is 22.
Which number should be removed to obtain an average of 24 for the remaining numbers?

16, 18, 24, 30

Ans: _____

20. Complete the tessellation below by drawing 2 more unit shapes in the grid provided.



21. Manesh cut a piece of rope g cm long into 25 equal pieces. In the end, he found that he had 6 cm of the rope left. What was the length of each piece? Express your answer in terms of g .

Ans: _____ cm

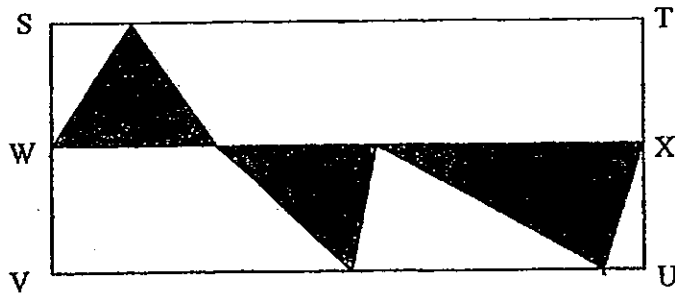
22. A frog is able to cover a distance of 30 cm in one jump. What is the least number of jumps it would need to cover a distance of 130 cm?

Ans: _____

23. Samy had 54 boxes of pens. Each box contained 8 pens. He repacked all the pens into boxes of 6 pens each. How many more boxes would he need?

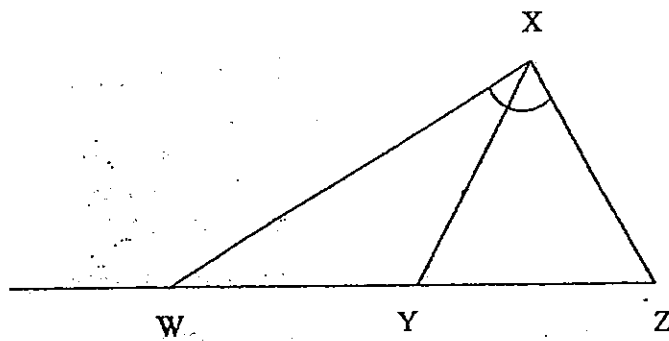
Ans: _____

24. In the figure below, $STUV$ is a rectangle. $SW = WV$ and $TX = XU$.
What fraction of the figure is shaded?



Ans: _____

25. The figure below is not drawn to scale. XYZ is an equilateral triangle.
 $XY = WY$. Find $\angle WXZ$.



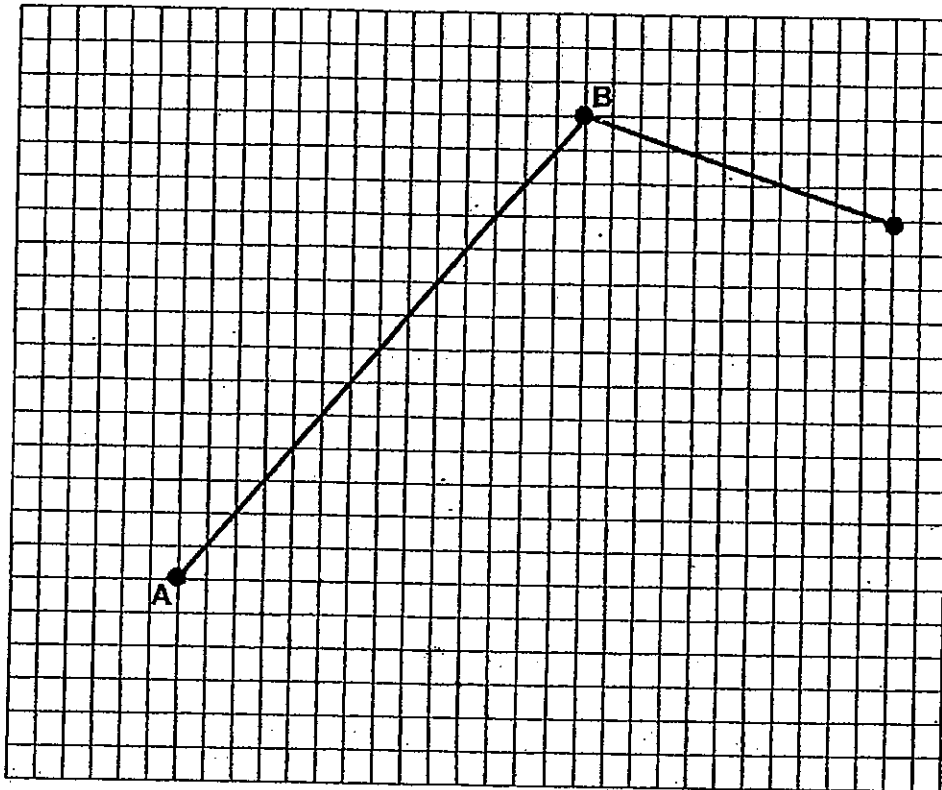
Ans: _____°

Questions 26 to 30 carry 2 marks each. Show your workings clearly in the space provided for each question and write your answers in the spaces provided.

For questions which require units, give your answers in the units stated.

(10 marks)

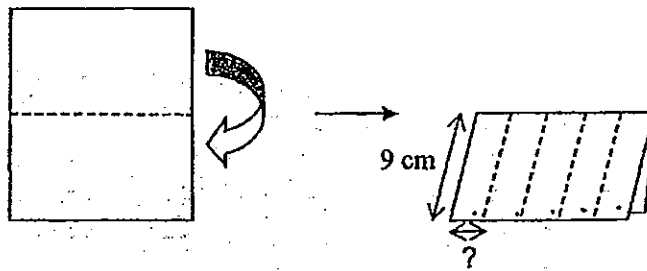
26. Complete the figure below such that ABCD is a parallelogram.



27. A motorist travelling at 80 km/h took 6 hours to complete his journey. If he decreased his speed by 20 km/h, how much longer would he take to complete the same journey?

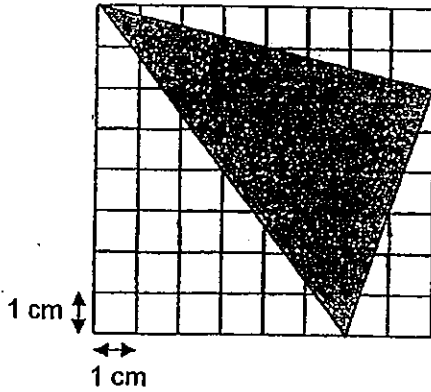
Ans: _____ h

28. Jenny had a piece of paper with an area 720 cm^2 . She folded it into half as shown in the diagram below (not drawn to scale). Then, she cut the folded paper into 5 equal strips. If the folded paper has a side of 9 cm, find the width of each strip.



Ans: _____ cm

29. Find the area of the shaded part in the figure shown below.



Ans: _____ cm^2

30. Pupils in a swimming class are divided equally into 2 groups. The ratio of the number of boys to the number of girls in Group A is 3 : 1. The ratio of the number of boys to the number of girls in Group B is 5 : 2. What is the ratio of the number of boys in Group A to the number of girls in Group B?

Ans: _____

End of Paper 1



Rosyth School
Semestral Assessment 1 Examination 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 14 May 2013

Parent's Signature: _____

Time: 1 h 40 min

PAPER 2

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. **Show your workings clearly** as marks are awarded for correct working.
4. Write your answers in this booklet.
5. You are allowed to use a calculator
6. Answer all questions.

Questions	Maximum Mark	Marks Obtained
Q 1 to 5	10	
Q 6 to 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

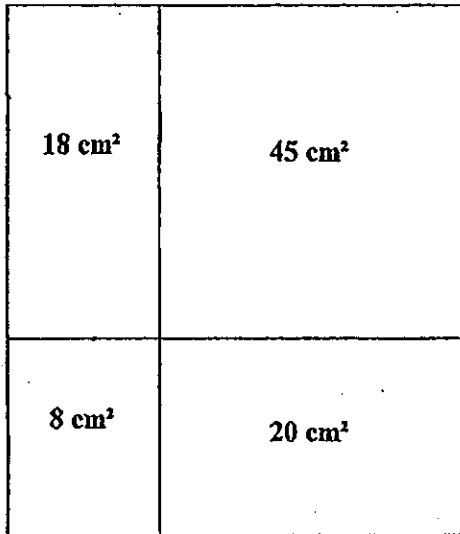
*** This booklet consists of 17 pages (including this cover page)**
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Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

Do not write
in this space

1. The figure (not drawn to scale) below is made up of 4 rectangles.
Find the perimeter of the whole figure.



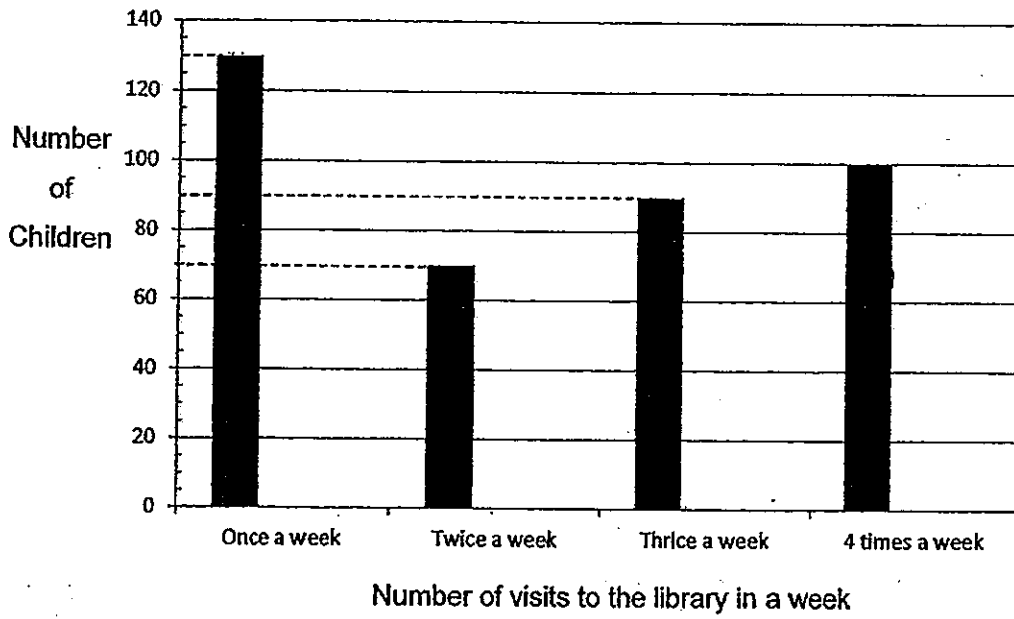
Ans: _____ cm

2. 60 cleaners take 12 days to clean a school. How many cleaners are required to clean the same school in 30 days?

Ans: _____

3. A survey was conducted to find out the number of times some children visited the library in a week.

Do not write
in this space



What fraction of the children visited the library at least twice a week?

Ans: _____

4. When Nathan spent $\frac{2}{3}$ of his money and Mark spent $\frac{1}{5}$ of his money, each of them had \$360 left. How much more did Nathan have than Mark at first?

Do not write
in this space

Ans: \$ _____

5. An amphitheatre at a bird park has a seating capacity of either 84 adults or 112 children. If 39 adults and 35 children have already bought the admission tickets into the amphitheatre, how many more children can enter the amphitheatre?

Ans: _____

(Go on to the next page)

Questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question.

(50 marks)

Do not write
in this space

-
6. The average number of books that were owned by Alice, Billy and Cathy each was 19. After Cathy's sister gave her another 8 books and Alice gave away 5 books, Alice and Cathy had the same number of books. If Billy owned 16 books, how many books did Alice have at first?

Ans: _____ [3m]

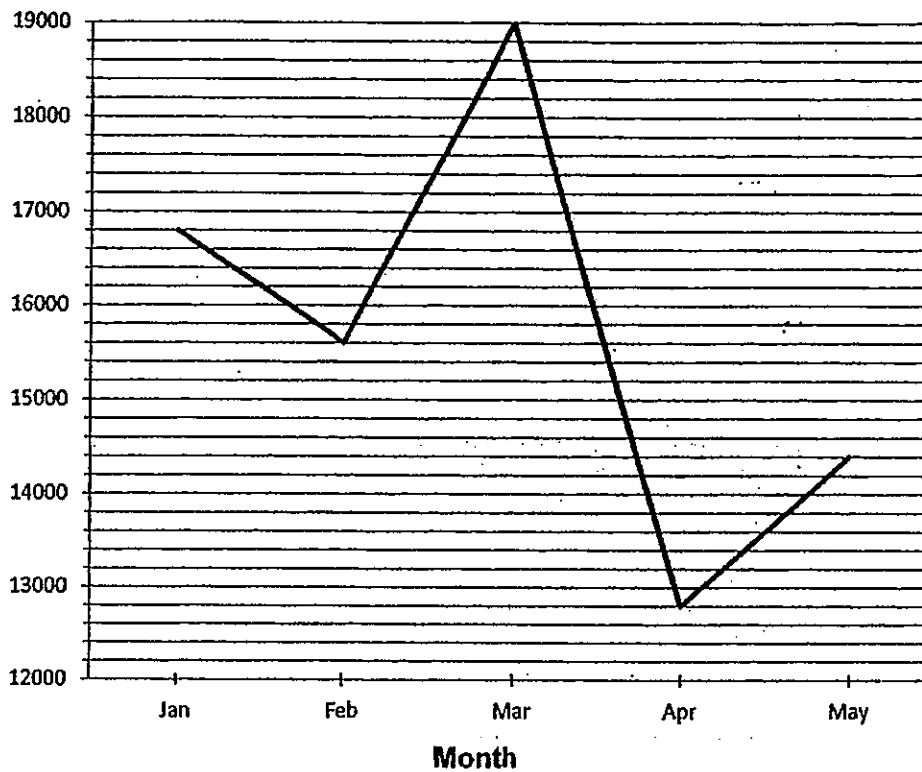
7. Use the information below to answer questions (a) and (b).

The graph below shows the number of cream puffs sold from January to May.

The number of cream puffs sold was recorded at the end of every month.

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in this space

Number of cream puffs sold



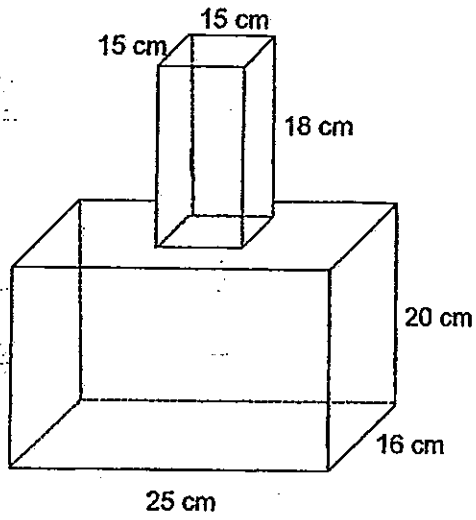
(a) In which month was there the greatest increase in the number of cream puffs sold?

(b) The total number of cream puffs sold from January to March was $\frac{4}{5}$ the number of cream puffs sold from April to June. How many cream puffs were sold in June?

Ans: (a) _____ [1m]

(b) _____ [2m]

8. The container shown below was filled with water to a height of 32 cm at first. Then, half of the water was poured out of the container. What was the height of the water level after that?



Do not write
in this space

Ans: _____ [3m]

9. The ratio of the number of Henry's pencils to the number of Yasmin's pencils was 3 : 5 at first. After each of them had received 45 pencils, Henry had $\frac{5}{8}$ as many pencils as Yasmin. Henry then bought another 65 pencils. How many more pencils did Yasmin have than Henry in the end?

Do not write
in this space

Ans: _____ [3m]

10. Ahmad painted some toy cars in blue, red and green. 42 of them were painted in blue. $\frac{7}{10}$ of the remaining toy cars were painted in red. The number of green toy cars was 21% of all the toy cars he painted. How many toy cars did he paint altogether?

Do not write
in this space

Ans: _____ [3m]

11. The table below shows the membership of a reading club in 2010.

Members	Number
Men	82
Women	112
Children	260
Senior Citizens	?

Do not write
in this space

- (a) Given that 50% of the members were children, how many members were senior citizens?
- (b) In 2011, the number of senior citizens in the club increased to 186 but the number of children decreased to 218.
- (i) Was there an overall percentage increase or decrease in the membership of the reading club in 2011?
- (ii) Find the overall percentage increase or decrease in the membership of the reading club in 2011.

Ans: (a) _____ [1m]

(b)(i) _____ [1m]

(b)(ii) _____ [2m]

Do not write
in this space

13. A bar of chocolate cost \$0.80. A free bar of chocolate was given for every purchase of 5 bars of chocolate. Diana spent \$60 buying some bars of chocolates. Then, she packed the bars of chocolate into packets of 3 each. She sold each packet for \$4.

(a) How many bars of chocolate did Diana get?

(b) How much money did she receive after selling all the packets of chocolate?

Ans: (a) _____ [2m]

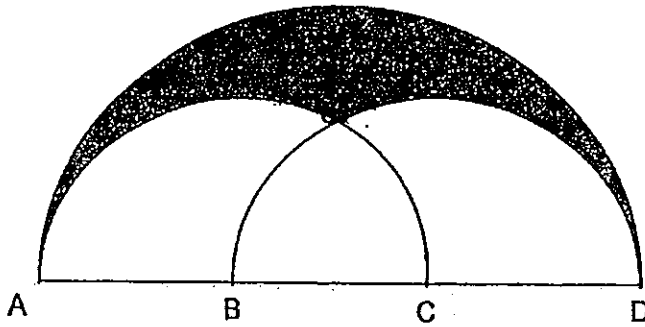
(b) _____ [2m]

(Go on to the next page)

Do not write
in this space

14. The figure is made up of a big semi-circle and 2 identical smaller semi-circles. The length of AD is 60 cm. The region BXC has an area of $\frac{242}{3} \text{ cm}^2$ and BXC has a length of 62.8 cm. Given that $AB = BC = CD$, find

- (a) the area of the shaded part and
(b) the perimeter of the shaded part. (Take π as 3.14)



Ans: (a) _____ [3m]

(b) _____ [2m]

15. An open-air concert ticket for an adult was priced at \$85.50. There were 150 more male adults than female adults for the first night concert. For the second night concert, the number of female adults was decreased by 15% and the number of male adults was increased by 30%. If there were 1 270 adults in the second night concert, how much more money was collected from the sale of the tickets for the second night concert than the first night concert?

Do not write
in this space

Ans: _____ [5m]

(Go on to the next page)

16. Miss Li and Miss Leo each sold a certain number of cupcakes at their shop. If Miss Li sold 60 cupcakes each day and Miss Leo sold 30 cupcakes each day, Miss Li would have 300 cupcakes left by the time Miss Leo finished selling all her cupcakes. If Miss Li sold 30 cupcakes each day and Miss Leo sold 60 cupcakes each day, Miss Li would have 930 cupcakes left by the time Miss Leo finished selling all her cupcakes. Find the number of cupcakes Miss Li had at her shop.

Do not write
in this space

Ans: _____ [5m]

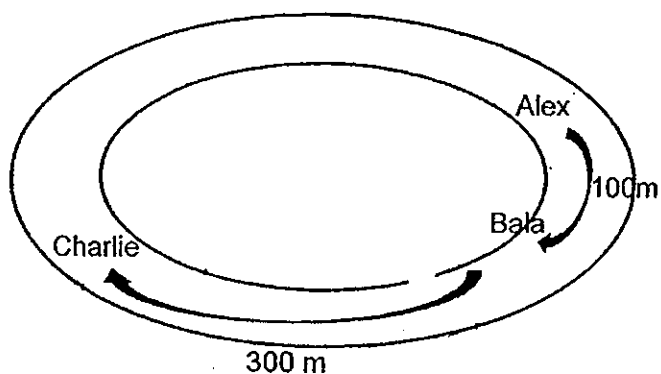
Do not write
in this space

17. Sally had a bag which contained only black and white cards. $\frac{4}{5}$ of the cards in the bag were black cards. She removed 35 black cards and 5 white cards from the bag and divided the remaining cards into groups of 7 cards each. In each group, there were 5 black cards. Find the total number of cards in the bag at first.

Ans: _____ [4m]

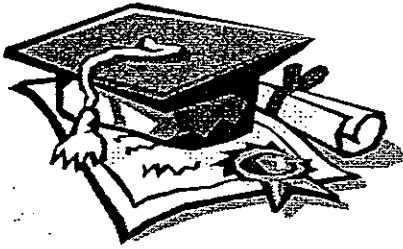
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18. Alex, Bala and Charlie were all standing in a circular track for a race to start. All of them had to run in clockwise direction as shown in the diagram below. Charlie was 300 m ahead of Bala and Bala was 100 m ahead of Alex. At 8.30 a.m, they started the race. Alex overtook Bala in 2 minutes. In another 2 minutes, Alex overtook Charlie. If Bala's speed is 140 m/min, at what time did Bala overtake Charlie?

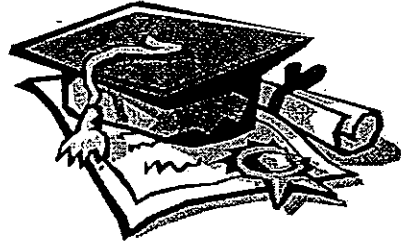


Ans: _____ [4m]

End of Paper



ANSWER SHEET




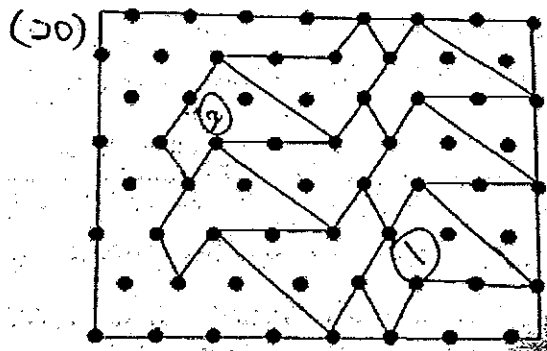
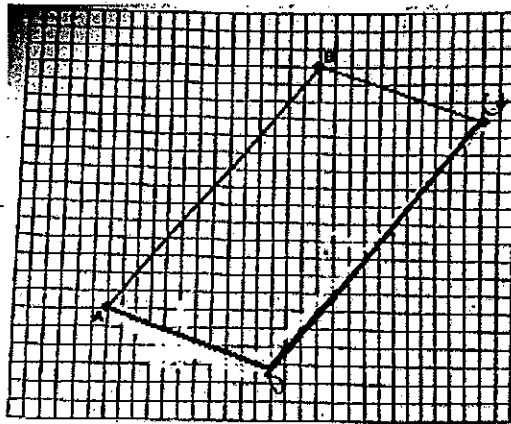
EXAM PAPER 2013

SCHOOL : ROSYTH PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATHEMATICS
TERM : SA1

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
1	2	3	4	3	2	3	4	3	2	1	1	4	4	3

- 16. 50.73
- 17. 3500
- 18. $\frac{1}{3}$
- 19. 16
- 20.21. $(g-6)/25$
- 22. 5
- 23. 18
- 24. $\frac{1}{4}$
- 25. 90°
- 26. 
- 27. 2h
- 28. 8cm
- 29. 26
- 30. 21:8



Paper 2

- 1. $2+5+=7$
- $7+7=14$
- $9+4=13$
- $13+13=26$
- $26+14=40$

2. $60 \text{ --- } 12\text{days}$

$10 \text{ --- } 72$

$1 \text{ ---- } 720$

$730 \div 30 = 24$

3. $70+90+100 = 260$

$260/390 = 2/3$

4. $1/3 \text{ --- } 360$

$3/3 \text{ --- } 1080$

$4/5 \text{ --- } 360$

$5/5 \text{ --- } 450$

$1080-450=630$

5. A --- $1/84$

C --- $1/112$

$1 - 39/84 - 35/112 = 25/112$

$25/112 \div 1/112 = 25$

6. $19 \times 4 = 57$

$2u \text{ --- } 57+8-5-16 = 44$

$1u \text{ --- } 22$

$22+5=27$

7. A. March

B. $16800+15600+19000=51400$

$4u \text{ --- } 51400$

$5u \text{ --- } 64250$

$64250-14400-12800 = 37050$

8. $20+18=38$

$25 \times 16 \times 20 = 8000$

$30-20=12$

$12 \times 5 \times 15 = 2700$

$2700+8000=10700$

$10700 \div 2 = 5350$

$5350 \div 25 \div 16 = 13.375$

9. A --- After

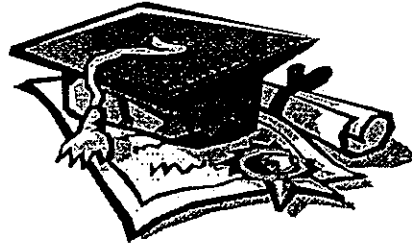
B --- Before

$3B + 45 = 5A$

$5B + 45 = 8A$

 $2B = 3A$

$1B = 1.5A$



 $4.5A + 45 = 5A$

$0.5A = 45$

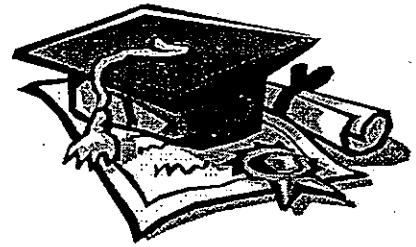
$1A = 90$

$1B = 135$

$H = 5 \times 90 + 65 = 515$

$Y = 8 \times 90 = 720$

$720 - 515 = 205$



10. $3u \text{ --- } 21\%$

$10u \text{ --- } 70\%$

$30\% \text{ --- } 42$

$100\% \text{ --- } 140$

11. A. $50\% \text{ -- } 260$

$100\% \text{ --- } 520$

$520 - 260 - 112 - 82 = 66$

B. Increase.

$186 - 66 = 120$

$260 - 218 = 42$

$120 - 42 = 78$

$78 / 520 \times 100\% = 15\%$

12. A. $180 - 31 - 31 = 118$

$360 - 108 - 118 = 134$

$180 - 134 = 46$

B. $(180 - 46) \div 2 = 67$

13. A. $60 \div 0.80 = 75$

$75 \div 5 = 15$

$75 + 15 = 90$

B. $90 \div 3 = 30$

$30 \times 4 = 120$

14. A. $\frac{1}{2} \times 3.14 \times 30 \times 30 - 3.14 \times 20 \times 20 + 242 = 399$

B. $\frac{1}{2} \times 3.14 \times 609 + 3.14 \times 40 - 62.8 = 157$

15. $130\% + 85\% + 195 \text{ --- } 1270$

$215\% \text{ --- } 1270 - 195 = 1075$

$$1\% \text{ --- } 5$$

$$200\% + 150 = 200 \times 5 + 150 = 1150$$

$$1270 - 1150 = 120$$

$$120 \times 85.50 = 10260$$

$$16. \quad 120u + 300 = 30u + 930$$

$$90u \text{ --- } 930 - 300 = 630$$

$$1u \text{ --- } 7$$

$$120u \text{ --- } 840$$

$$840 + 300 = 1140$$

$$17. \quad 4/5 \text{ ---- black}$$

$$1/5 \text{ ---- white}$$

$$5 \times 7 = 35$$

$$35 + 35 + 5 = 75$$

$$5/5 = 75$$

$$18. \quad \text{A overtake B in 2 mins of distance 100m}$$

A is 50m/min faster than B

B ----- 140m/min

A ----- 190m/min

A overtake C in another 2 mins

4 mins of distance 400m

A is 100m/min faster than C

C ----- 90m/min

$$300 \div (140 - 90) = 6 \text{ mins}$$

$$8:30 \text{ am} + 6 \text{ mins} = 8.36 \text{ am}$$

SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2013

PRIMARY 6

MATHEMATICS
PAPER 1

BOOKLET A

Name : _____ ()

Class : Primary 6 SY/C/G/SE/P

		Marks attained	Max Mark
Paper 1	Booklet A		20
	Booklet B		20
Paper 2			60
Total Marks			100

Parent's Signature

15 Questions
20 Marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

You are not allowed to use a calculator

Booklet A

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.

For each question, four options are given. One of them is the correct answer.

Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. **(20 marks)**

1 In 9 023.154, the digit 4 is in the _____ place.

- (1) hundreds
- (2) ones
- (3) tenths
- (4) thousandths

2 The mass of a chair is approximately _____ g.

- (1) 30
- (2) 300
- (3) 3
- (4) 3000

3 If $\heartsuit + \heartsuit + \heartsuit + \heartsuit = 60$ and $\heartsuit + \clubsuit = 150$, what is the value of \clubsuit ?

- (1) 15
- (2) 90
- (3) 135
- (4) 210

4 Evaluate $\frac{4}{9} \div \frac{2}{3}$

(1) $\frac{4}{9} \times \frac{2}{3}$

(2) $\frac{4}{9} \times \frac{3}{2}$

(3) $\frac{9}{4} \times \frac{2}{3}$

(4) $\frac{9}{4} \times \frac{3}{2}$

5 The perimeter of a square is 24 cm. What is its area?

(1) 6 cm^2

(2) 12 cm^2

(3) 36 cm^2

(4) 48 cm^2

6 Which of the following is equal to $\frac{1}{2}\%$?

(1) 0.005

(2) 0.5

(3) 5.0

(4) 50.0

7 $5 \times \frac{1}{8}$ is the same as _____.

(1) $\frac{6}{8}$

(2) $\frac{51}{8}$

(3) $\frac{1}{8} \times \frac{1}{8} \times \frac{1}{8} \times \frac{1}{8} \times \frac{1}{8}$

(4) $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$

8 $3z + 4 + 4z - 3 =$ _____

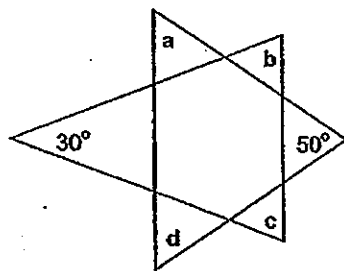
(1) $7z - 7$

(2) $7z + 7$

(3) $7z + 1$

(4) $7z - 1$

9 The figure below is made up of two triangles.
Find the value of $\angle a + \angle b + \angle c + \angle d$.



(1) 130°

(2) 150°

(3) 280°

(4) 310°

10 Mr. Tan cycled 10 km in 30 minutes. What was his cycling speed in km/h?

- (1) 3 km/h
- (2) 20 km/h
- (3) 300 km/h
- (4) 600 km/h

11 A string 6.3 m long is cut into two pieces in the ratio 4 : 1.
Find the length of the longer piece.

- (1) 1.2 m
- (2) 1.26 m
- (3) 2.3 m
- (4) 5.04 m

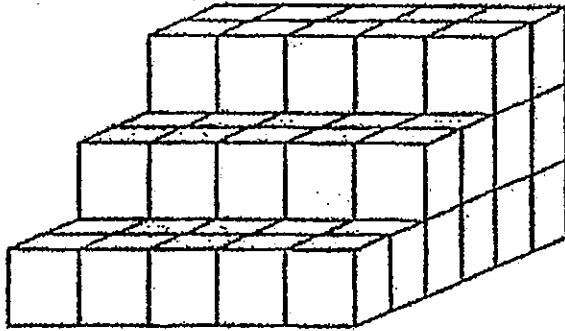
12 $46 \times 76 = 46 \times 32 + 46 + 46 \times \underline{\hspace{2cm}}$

- (1) 73
- (2) 46
- (3) 44
- (4) 43

13 Which one of the following is smaller than $\frac{1}{3}$ but larger than $\frac{1}{8}$?

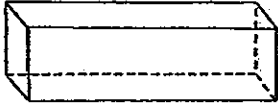
- (1) 0.12
- (2) 0.25
- (3) 0.375
- (4) 0.667

- 14 The figure below is made up of cubes of the same size. What is the least number of cubes that must be added to form a cuboid?

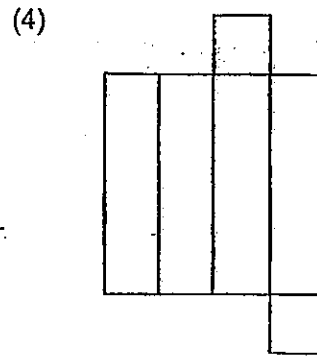
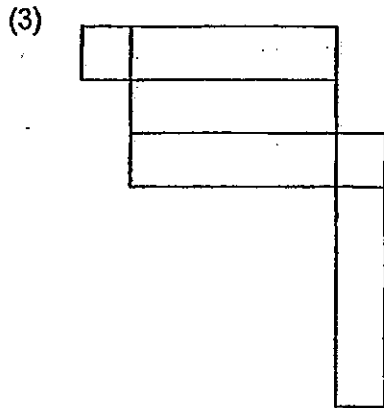
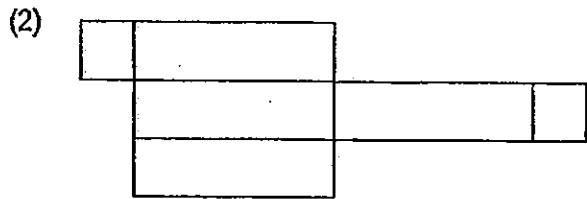
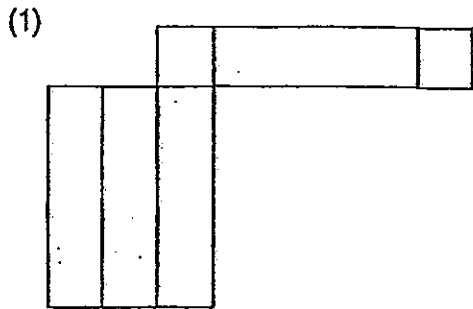


- (1) 10
- (2) 20
- (3) 30
- (4) 40

15 The figure shows a solid.



Which of the following is not the net of the solid?



SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2013

PRIMARY 6

MATHEMATICS
PAPER 1

BOOKLET B

Name : _____ ()

Class : Primary 6 SY/C/G/

Paper 1	Mark attained	Max Mark
Booklet B		20

15 Questions
20 Marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

You are not allowed to use a calculator

Booklet B

Name: _____ () Class: P6 SY/C/G/SEP

Do not write
in this
column

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (10 marks)

16 Write down all the common factors of 6 and 12.

Answer: _____

17 Find the value of $3\frac{1}{4} - 1\frac{7}{12}$. (Give your answer in the simplest form.)

Answer: _____

18 The number of books in a library is 240 000 when rounded off to the nearest thousand. What is the largest possible number of books in the library?

Answer: _____

3

- 19 Which of the following letters have more than one line of symmetry?

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in this
column

PINES

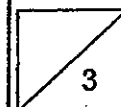
Answer: _____

- 20 Mrs Tan's age is $\frac{9}{2}$ of her daughter's age. Find the ratio of her daughter's age to their total age.

Answer: _____

- 21 Susan donated $\frac{3}{10}$ of her salary to charity. She spent $\frac{2}{5}$ of it. What percentage of her salary had she left?

Answer: _____ %



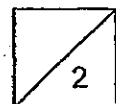
22 Find the value of $\frac{15m}{5}$ when $m = 3$.

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in this
column

Answer: _____

23 Express 3 litres 5 millilitres in litres.
(Express your answer as a decimal.)

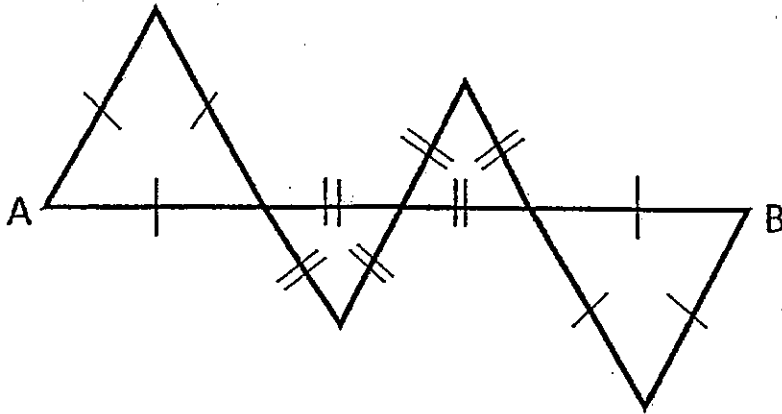
Answer: _____ litres



- 24 The figure is made up of four equilateral triangles, 2 big and 2 small triangles resting on the line AB.

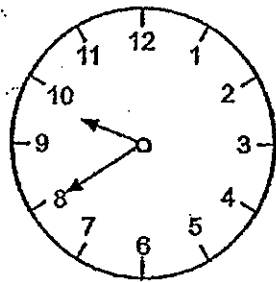
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Given that the length of AB is 20 cm, find the perimeter of the figure.

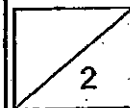


Answer: _____ cm

- 25 The clock below shows 9.40 p.m. What time will it show when the minute hand moves through three right angles?



Answer: _____ pm



Questions 26 to 30 carry 2 marks each. Show your working clearly in the space for each question and write your answers in the space provided.
For questions which require units, give your answers in the units stated.

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in this
column

(10 marks)

26 Clarice is $(3y + 2)$ years old and she is 3 years younger than her brother, Edrick. How old will Edrick be in 17 years' time?

Answer: _____ years old

27 Jaime took 40 minutes to drive from point A to point B at an average speed of 90 km/h. Rachel covered the same distance in 30 minutes. What was Rachel's average speed?

Answer: _____ km/h

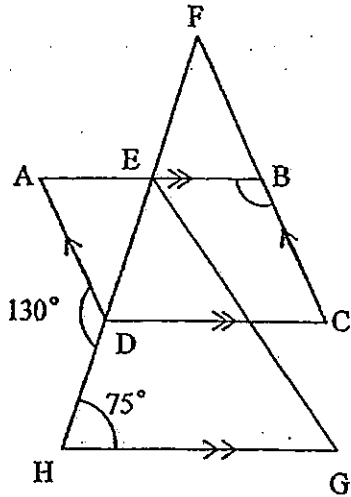
28 When 9 is added to $\frac{3}{8}$ of a number, the result is 24. What is the number?

Answer: _____



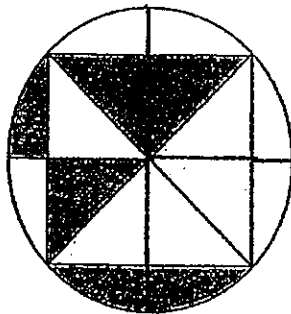
- 29 In the figure below, not drawn to scale, ABCD is a parallelogram. CDF and GHE are triangles. HG is parallel to DC and AB. $\angle DHG = 75^\circ$ and $\angle ADH = 130^\circ$. Find $\angle ABC$.

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column

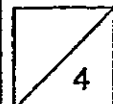


Ans: a) _____°

- 30 Find the ratio of the shaded region to the unshaded region.



Ans: _____



SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2013

PRIMARY 6

MATHEMATICS

PAPER 2

Name : _____ ()

Class : Primary 6 SY/~~C~~G/SE/P

Paper 2	Mark	Max Mark	Parent's Signature
		60	

18 Questions
60 Marks

Total Time For Paper 2: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

You are allowed to use the calculator

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the space provided. For questions which require units, give your answers in the units stated. (10 marks)

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1 The table below shows the rental charges of bicycles.

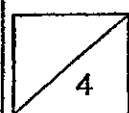
RENTAL CHARGES	
For the first hour	\$7.00
For every additional half an hour or part thereof	\$1.00

Jessica rented a bicycle from 12 noon to 6.35 p.m. the same day.
How much did she pay for the rental charges?

Ans: \$ _____

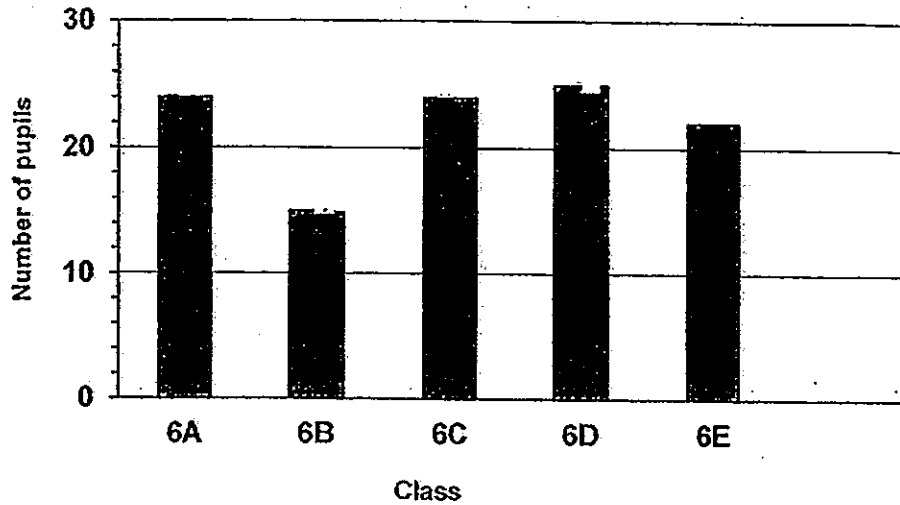
2 At an electronics fair, a vacuum cleaner was on offer. Mrs Tan paid \$270 for it after a 40% discount. What was the original price of the vacuum cleaner?

Ans: \$ _____



- 3 The graph below shows the number of pupils who passed a Math test. There were 30 pupils in each of the 5 classes. What percentage of pupils failed the test? (Express your answer as a fraction in its simplest form.)

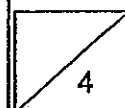
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Ans: _____ %

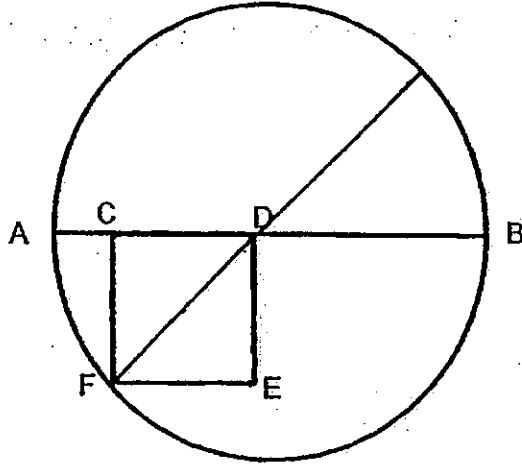
- 4 I am thinking of a fraction. The sum of the numerator and denominator is 19. When I add 8 to the denominator, the fraction becomes $\frac{1}{2}$. What is the fraction I am thinking of?

Ans: _____

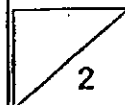


- 5 The figure below, shows a square CDEF with Point D touching the centre of the circle. Given that Point F touches the circumference of the circle and line CE is 8 cm. Find the diameter of the circle.

Do not write
in this
column



Ans: _____



Questions 6 to 18, show your working clearly in the space below each question and write your answers in the space provided. The number of marks awarded is shown in the brackets [] at the end of the question or part-question.

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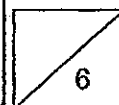
(50 marks)

- 6 At a conference, $\frac{4}{5}$ of the participants were Singaporeans and the rest were Malaysians. After 20 Singaporeans had left the conference, another 20 Malaysians joined in. Hence the number of Singaporeans became $\frac{8}{15}$ of the total number of participants. How many Singaporeans were there at the start of the conference?

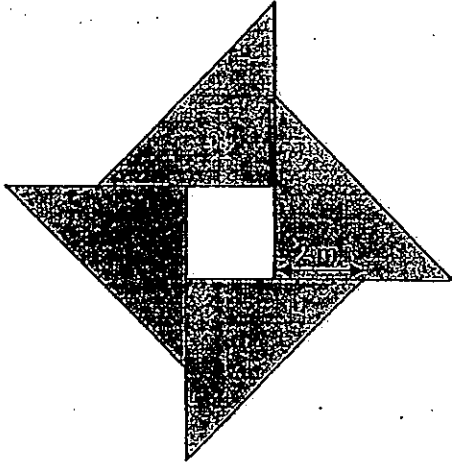
Ans : _____ [3]

- 7 There were 120 participants in a baking competition. $\frac{1}{2}$ of them won either the gold or the silver award. $\frac{3}{4}$ of them received the silver or the commendation award. How many of them received the silver award?

Ans : _____ [3]



- 8 The figure below is not drawn to scale. It is made up of 4 identical right-angled isosceles triangles. There is a square in the centre. The shaded area of the figure is 72 m^2 . Find the side of the square.

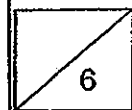


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Ans : _____ [3]

-
- 9 A bus can carry 30 adults or 45 children. If the bus has already 20 adults and 10 children aboard, how many more children can the bus carry?

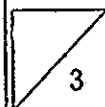
Ans : _____ [3]



- 10 Christina and Belinda saved \$800 altogether. $\frac{1}{4}$ of Christina's saving was \$65 more than $\frac{1}{5}$ of Belinda's savings. How much more money did Christina save than Belinda?

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column

Ans : _____ [3]



11a Look at the pattern below. How many  are there in figure 16?

Do not write
in this
column



Figure 1



Figure 2

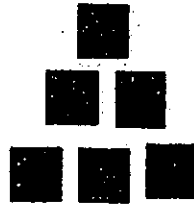


Figure 3

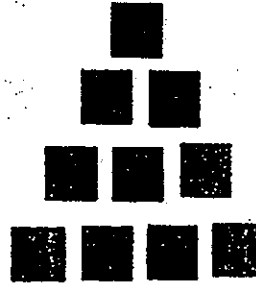


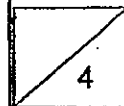
Figure 4

305472930547293054729.....

(b) Look at the pattern above, what will be the 79th digit?

Ans: (a) _____ [2]

(b) _____ [2]



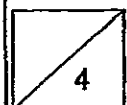
12 There were 1680 animals in John's farm and 20% more animals in Doug's farm. When an equal number of animals was sold by each farmer, the animals left in John's farm became 60% that of Doug.

- a) How many animals did Doug have at first?
- b) How many animals did John have in the end?

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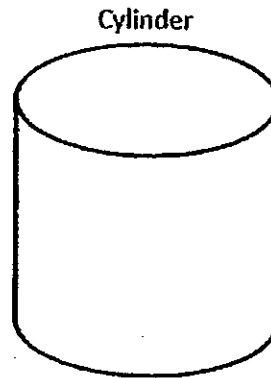
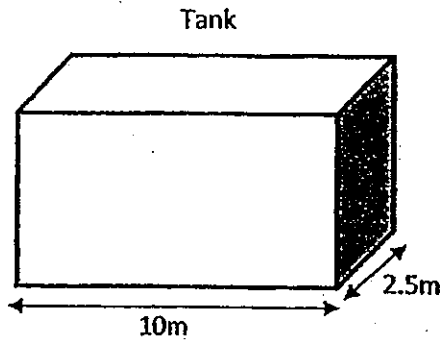
Ans: (a) _____ [1]

(b) _____ [3]

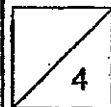


- 13 A rectangular tank measuring 10 m and 2.5 m wide is completely filled with water. When 30% of the water from the rectangular tank is poured into an empty cylindrical container, the container is only 25% full. The capacity of the cylindrical container is 10m^3 more than that of the rectangular tank. Find the height of the tank.

Do not write
in this
column



Ans : _____ [4]



- 14 Peter bought some items to sell at a carnival. $\frac{3}{5}$ of the items were key chains and the rest were mugs. He spent a total of \$520 on all the items. In total, he spent \$280 more on mugs than on key chains. Given that each mug cost \$8 more than each key chain, what was the cost of each mug?

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column

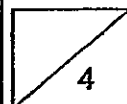
Ans : _____ [4]



- 15 Linda had \$85 more than Jessica. Michelle had \$36 more than the total amount of what Linda and Jessica had. If Michelle had \$974 more than Linda, how much money did Michelle have?

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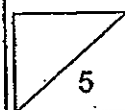
Ans : _____ [4]



16 100 people went for a health check at a polyclinic. Their average mass was 65 kg. Given that the average mass of the women was 50 kg and the average mass of men was 70 kg, how many men were there?

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column

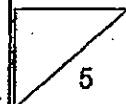
Ans : _____ [5]



- 17 Michael had 80% as many marbles as Josh at the start of a game. Michael lost 75% of his marbles to Josh during the first game. Josh then lost 25% of his marbles to Michael during the second game. If Michael had 258 marbles at the end of the second game, how many marbles did Josh have at first?

Do not write
in this
column

Ans : _____ [5]



18 Rachel, Amber and Christine each made some cards for sale at a school carnival.

At first, Rachel made 1365 cards more than Amber.

Then Rachel sold 420 cards and made another 175 more.

Christine sold 140 cards and made another 350 more.

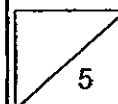
Amber made more cards and the number of her cards doubled.

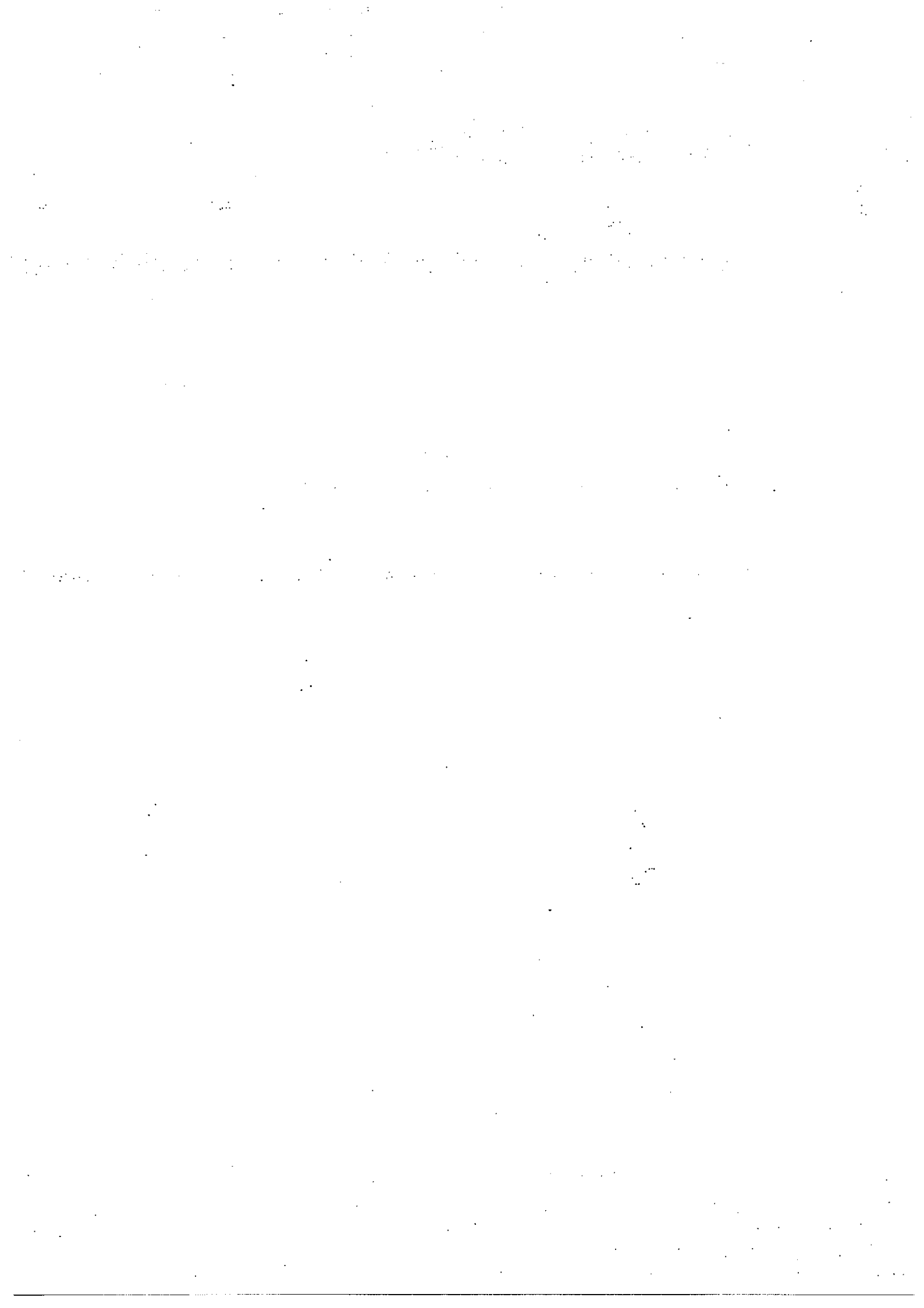
In the end, all three girls had the same number of cards.

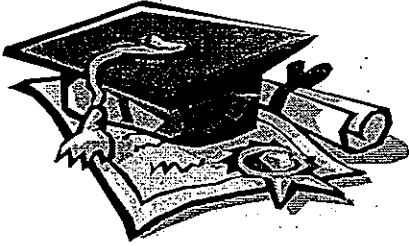
Find the number of cards Christine had at first.

Do not write
in this
column

Ans: _____ [5]







ANSWER SHEET

EXAM PAPER 2013

SCHOOL : SCGS

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
4	4	3	2	3	1	4	3	3	2	4	4	2	3	2

16)1,2,3,6

17) $1\frac{2}{3}$

18)240499

19)I

20)2:11

21)30%

22)9

23)3.005L

24)60cm

25)10.25pm

26) $(3y+22)$

27)120km/h

28)40

29) 125°

30)3:5

Paper 2

1)12pm to 1pm→\$7

1pm to 6pm→\$1 x10 = \$10

6pm to 6.30pm→\$1

6.30pm to 6.35pm→\$1

$\$7+\$10+\$1+\$1 = \$19$

2)Discount→40%

Pay →100% - 40% = 60%

60% →\$270

1% →\$270 ÷ 60 = \$4.50

Original price→100%

100% →\$4.50 x 100 = \$450

3) $26\frac{2}{3}$

4) $1u + 2u = 3u$

$3u \rightarrow 27$

$1u \rightarrow 27 \div 3 = 9$

Numerator $\rightarrow 9$

Denominator $\rightarrow (9 \times 2) - 8 = 10$

Fraction $\rightarrow 9/10$

5) $8 + 8 = 16\text{cm}$

6) $4u \rightarrow 20$

$1u \rightarrow 20 \div 4 = 5$

$12u \rightarrow 5 \times 12 = 60$ Singaporeans

7) $120 \div 2 = 60$

Gold or silver $\rightarrow 60$

$120 \div 4 \times 3 = 90$

Silver or commendation $\rightarrow 90$

$60 + 90 = 150$

$150 - 120 = 30$

Silver $\rightarrow 30$

Gold $\rightarrow 60 - 30 = 30$

Commendation $\rightarrow 90 - 30 = 60$

Ans: 30 participants.

8) 4 Triangle $\rightarrow 72$

1 Triangle $\rightarrow 72 \div 4 = 18$

$18 \times 2 = 36$

Breath x Height $\rightarrow 36$

Breath $\rightarrow \sqrt{36} = 6$

Height $\rightarrow \sqrt{36} = 6$

1 side of square $\rightarrow 6 - 2 = 4\text{m}$

9) 30 adults = 45 children

$\downarrow \div 15$
2 adults = 3 children

$\downarrow \times 10$
20 adults = 30 $\times 10 = 30$ children

$30 + 10 = 40$

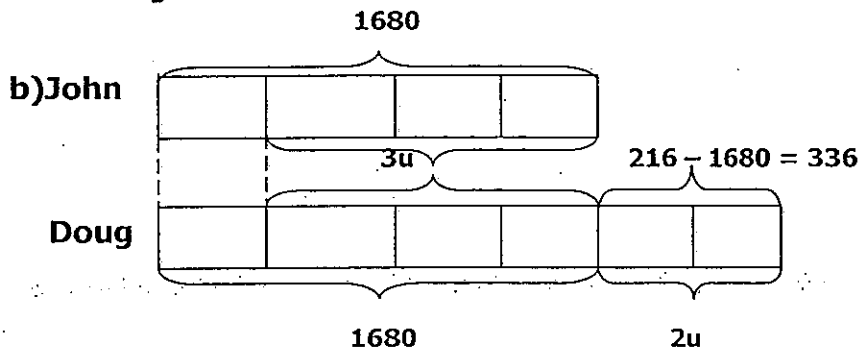
$45 - 40 = 5$ more children

10) $65 \times 5 = 325$
 $800 + 325 = 1125$
 $5u + 4u = 9u$

$9u \rightarrow 1125$
 $1u \rightarrow 1125 \div 9 = 125$
 C save $\rightarrow 125 \times 4 = 500$
 B save $\rightarrow 800 - 500 = 300$
 Diff $\rightarrow 500 - 300 = \200

11) a) 136
 b) 0

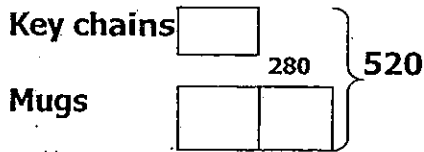
12) a) John $\rightarrow 1680$
 Doug $\rightarrow 1680 \div 5 = 5 \times 6 = 2016$



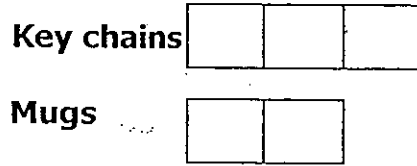
$2u \rightarrow 336$
 $1u \rightarrow 336 \div 2 = 168$
 Doug $\rightarrow 168 \times 5 = 840$ animals
 John $\rightarrow 168 \times 3 = 504$ animals

13) $25\% = \frac{1}{4}$
 $\frac{3}{10}$ Rect = $\frac{1}{4}$ cylinder
 $\frac{3}{10}$ Rect = $\frac{3}{12}$ cylinder
 Rect $\rightarrow 10u$
 Cylinder $\rightarrow 12u$
 $12u - 10u = 2u$
 $2u \rightarrow 10m^3$
 $1u \rightarrow 10 \div 2 = 5m^3$
 Capacity of rect $\rightarrow 10 \times 5 = 50m^3$
 $50 \div 10 \div 2.5 = 2m$
 Height of rect $\rightarrow 2m$

14) Amount spent



Number



$520 - 280 = 240$

Spent on key chains $\rightarrow 240 \div 2 = 120$

Spent on mugs $\rightarrow 120 + 280 = 400$

1u of key chains $\rightarrow 120 \div 3 = 40$

1u of mugs $\rightarrow 400 \div 2 = 200$

$200 - 40 = 160$

$160 \div 8 = 20$

1u $\rightarrow 20$

2u $\rightarrow 20 \times 2 = 40$

$400 \div 40 = \$10$

15) $974 - 36 = 938$

1u $\rightarrow 938$

2u $\rightarrow 938 \times 2 = 1876$

$1876 + 85 + 36 = \$1997$

16) Average $\rightarrow 65$

Total $\rightarrow 65 \times 100 = 6500$

$6500 - 6000 = 500$

$70 - 50 = 20$

$500 \div 20 = 25$

Men $\rightarrow 25 + 50 = 75$

Women $\rightarrow 50 - 25 = 25$

Ans: 75 men

17) $3u \rightarrow 258$

1u $\rightarrow 258 \div 3 = 86$

5u $\rightarrow 86 \times 5 = 430$ marbles

18) $1365 - 420 + 175 = 1120$

1u Amber $\rightarrow 1120$

2u Amber $\rightarrow 1120 \times 2 = 2240$

Amber in the end $\rightarrow 2240$

$2240 - 350 + 140 = 2030$



PRIMARY 6 MID-YEAR EXAMINATION 2013

Name : _____ () Date: 17 May 2013

Class : Primary 6 () Time: 8.00 a.m. - 8.50 a.m.

Parent's Signature : _____ Marks: _____ / **100**

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS

PAPER 1

(BOOKLET A)

INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.
6. You are **not** allowed to use a calculator.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet.

(20 marks)

- 1) In 15.379, the digit 7 is in the _____ place.
- (1) thousandths
 - (2) hundredths
 - (3) tenths
 - (4) tens
- 2) What is the value of the digit 3 in 6 130 058?
- (1) 30
 - (2) 300
 - (3) 3
 - (4) 30 000
- 3) How many ninths are there in $3\frac{1}{3}$?
- (1) 7
 - (2) 10
 - (3) 21
 - (4) 30
- 4) What percentage of \$10 is 20¢?
- (1) 20%
 - (2) 2%
 - (3) 200%
 - (4) 500%
- 5) A is 5 times of B. B is thrice of C. What is the ratio of C to A?
- (1) 1 : 15
 - (2) 15 : 1
 - (3) 1 : 5
 - (4) 5 : 1

6) Express 0.6% as a fraction in its simplest form.

(1) $\frac{3}{5}$

(2) $\frac{1}{6}$

(3) $\frac{3}{50}$

(4) $\frac{3}{500}$

7) Express $2\frac{1}{6}$ hours in minutes.

(1) 106 min

(2) 110 min

(3) 126 min

(4) 130 min

8) The sum of $\frac{1}{4}$ and $\frac{1}{5}$ is _____.

(1) 0.45

(2) 0.25

(3) 0.20

(4) 0.09

9) At 10 a.m., Ming Le left Town A and cycled towards Town B at 15 km/h. He reached Town B at 1 p.m. Find the distance between Town A and Town B.

(1) 15 km

(2) 30 km

(3) 45 km

(4) 60 km

10) The number of people who went to a book fair was 60 000 when rounded off to the nearest hundred. Which of the following is the best estimate of the number of people?

(1) 60 055

(2) 60 051

(3) 59 951

(4) 59 949

11) The diameter of a circle is 14 cm. Find its circumference. (Take $\pi = \frac{22}{7}$)

- (1) 44 cm
- (2) 88 cm
- (3) 154 cm
- (4) 616 cm

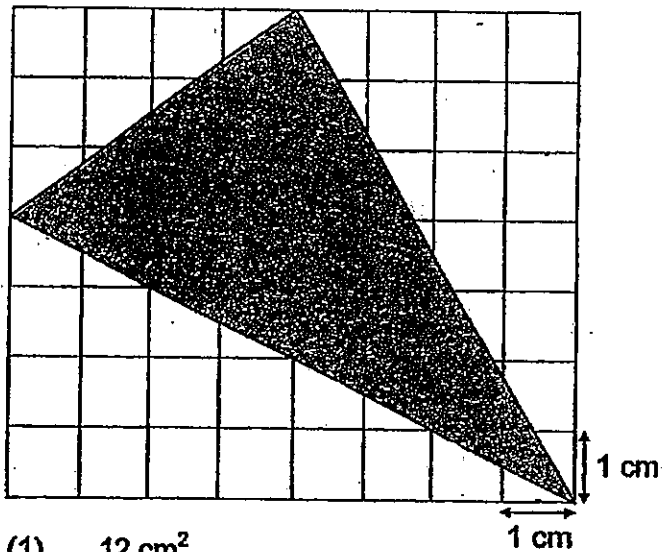
12) The total surface area of a cube is 96 cm^2 . Find its volume.

- (1) 256 cm^3
- (2) 64 cm^3
- (3) 16 cm^3
- (4) 4 cm^3

13) Ramad had \$200. He spent half of it on a gift and 15% of the remainder to buy a book. How much did Ramad have in the end?

- (1) \$70
- (2) \$85
- (3) \$115
- (4) \$130

14) Find the area of the shaded triangle below.



- (1) 12 cm^2
- (2) 16 cm^2
- (3) 20 cm^2
- (4) 28 cm^2

15) Mr Gopal uses 12 seconds to cut a log cake into 4 equal parts. How long will he take if he cuts the cake into 8 equal parts?

- (1) 21 s
- (2) 24 s
- (3) 28 s
- (4) 32 s

- End of Booklet A -



PRIMARY 6 MID-YEAR EXAMINATION 2013

Name : _____ ()

Date: 17 May 2013

Class : Primary 6 ()

Time: 8.00 a.m. - 8.50 a.m.

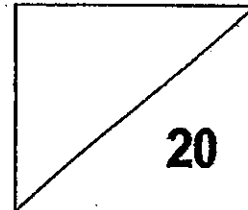
Parent's Signature : _____

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS

PAPER 1

(BOOKLET B)



INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.
6. You are not allowed to use a calculator.

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (10 marks)

16) Arrange the following numbers in ascending order.

1.019 10.109 10.19 10.1

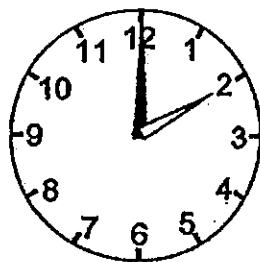
Ans: _____

17) $12 : 18 = \underline{\hspace{2cm}} : 30$

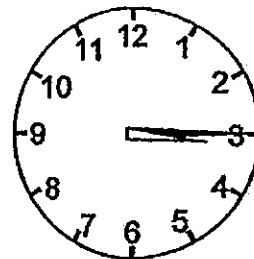
Ans: _____

18)

Start



End



The above shows the time Ben spent doing his homework.
How many right angles did the minute hand of the clock travel?

Ans: _____

19) Express 5.04 as a mixed number in its simplest form.

Ans: _____

20) What is the quotient when 8018 is divided by 9?

Ans: _____

21) Dahlia ran 2 times around the school field at an average speed of 200 m/min. How long did she take if each round was 0.4 km?

Ans: _____ min

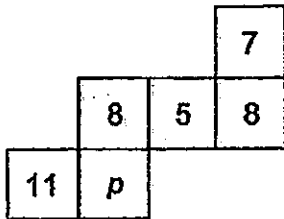
22) $\frac{1}{2}$ of a number is 6. What is $\frac{5}{6}$ of the number?

Ans: _____

- 23) Shawn is the 20th pupil from the top and bottom of the class list. How many pupils are there in his class?

Ans: _____

- 24) The figure below shows the net of a cube with 6 different numbers printed on each of its faces. The sum of the numbers on opposite faces is 16. Find the value of p .



Ans: _____

- 25) $\frac{4}{5}$ of Mr Lee's mass is equal to $\frac{7}{8}$ of Mr Tan's mass. What is the ratio of Mr Lee's mass to Mr Tan's mass?

Ans: _____

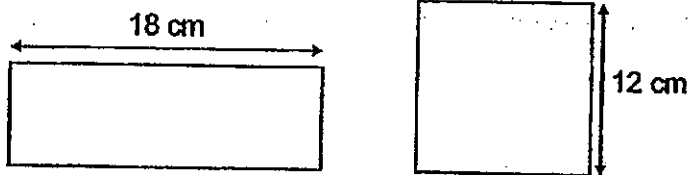
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 26) Find the sum of the following algebraic expressions when $n = 8$.

$$n + 2, 2n + 4, 3n + 6$$

Ans: _____

- 27) The diagrams below are not drawn to scale. Both the rectangle and square have the same area. The length of one side of the square is 12 cm. What is the breadth of the rectangle?

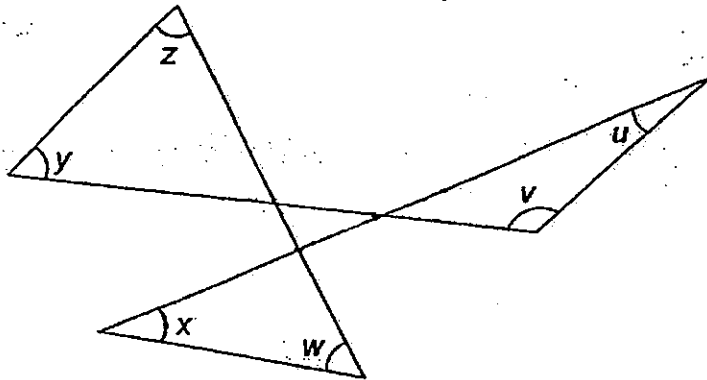


Ans: _____ cm

- 28) The ratio of Ali's age to Lily's age is 10 : 9. Last year, their average age was 18 years old. How old is Lily now?

Ans: _____ years old

- 29) The figure below is not drawn to scale.
Find the sum of $\angle u$, $\angle v$, $\angle w$, $\angle x$, $\angle y$ and $\angle z$.



Ans: _____°

- 30) Study the pattern. What is the missing number?

$$4 \times 4 - 3 \times 3 = 7$$

$$21 \times 21 - 20 \times 20 = 41$$

$$43 \times 43 - 42 \times 42 = 85$$

$$105 \times 105 - 104 \times 104 = ?$$

Ans: _____

- END OF PAPER 1 -



PRIMARY 6 MID-YEAR EXAMINATION 2013

Name : _____ () Date: 17 May 2013

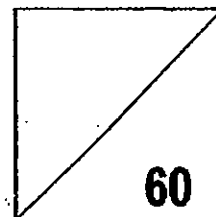
Class : Primary 6 ()

Time: 10.00 a.m. – 11.40 a.m.

Parent's Signature : _____

MATHEMATICS

PAPER 2

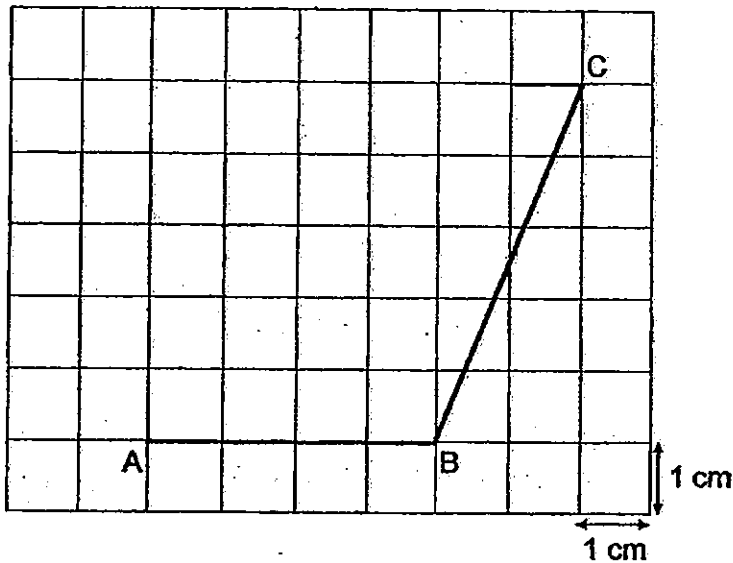


INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Show your working clearly as marks are awarded for correct working.
6. You are allowed to use a calculator.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

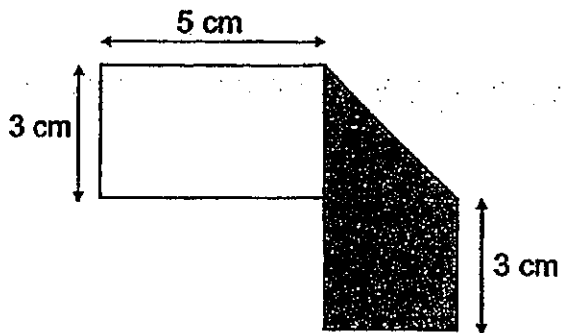
- 1) AB and BC are sides of a parallelogram.
Complete the parallelogram, ABCD.



- 2) David and Peter shared a sum of money. If David's share of money increased from \$6789 to \$6924, Peter's share of money decreased by 15%. Find the amount of money Peter received at first.

Ans: \$ _____

- 3) In the diagram (not drawn to scale) below, a rectangular piece of paper is folded to form the shape shown below. Find the area of the rectangular piece of paper before it was folded.



Ans: _____ cm²

- 4) There are some apples, oranges and pears in a box. $\frac{2}{3}$ of the fruits are apples. The ratio of the number of oranges to the number of pears is 2 : 1. If there are 8 more apples than oranges, find the number of pears in the box.

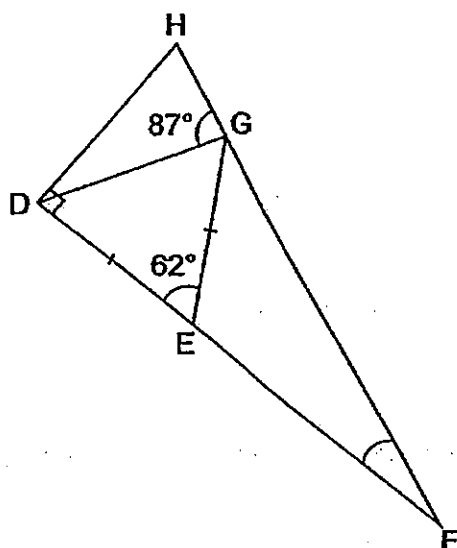
Ans: _____

- 5) A pencil cost 50¢. Yiling bought b pencils and gave the cashier a five-dollar note. How much change did she receive?

Ans: \$ _____

For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided.
 The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

- 6) In the figure below, not drawn to scale, DFH is a right-angled triangle. Find $\angle EFG$.

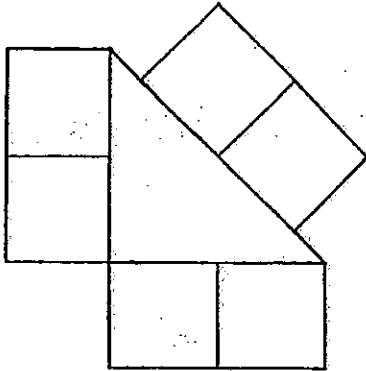


Ans: _____ [3m]

- 7) On Day 1, John read $\frac{2}{5}$ of a book. The next day, he read $\frac{7}{9}$ of the remaining pages. On Day 3, he finished reading the last 70 pages. How many pages were there in the book?

Ans: _____ [3m]

- 8) The figure below, not drawn to scale, comprises of 1 right-angled triangle and 6 identical squares. The total area of the squares is 150 cm^2 . Find the area of the triangle.



Ans: _____ [3m]

- 9) $\frac{3}{5}$ of the children in Group A are girls. $\frac{3}{4}$ of the children in Group B are boys. There are 21 more girls in Group A than in Group B and an equal number of boys in both groups. How many children are there altogether?

Ans: _____ [3m]

- 10) The table below shows part of Devi's results of her class tests.

Subject	Marks Obtained
English	
Mathematics	
Chinese	90
Science	95

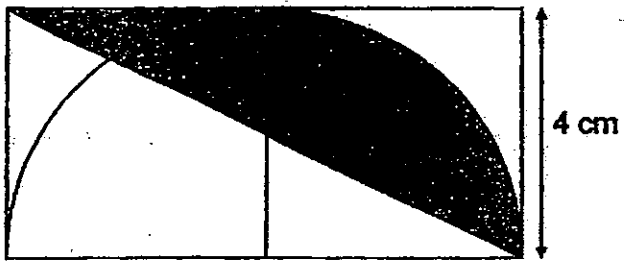
The maximum mark for each test is 100. Devi obtained an average of 93.25 marks for her tests. If she scored 10 less marks for her English test than Mathematics test, find her Mathematics mark.

Ans: _____ [3m]

- 11) Faizal took part in a 42-km triathlon. He completed the race by swimming 1 km, cycling for $1\frac{1}{2}$ hours and running 5 km. Find Faizal's cycling speed.

Ans: _____ [3m]

- 12) The figure below, not drawn to scale, comprises a semi-circle and 2 squares. What is the area of the shaded region? Leave your answer in terms of π .



Ans: _____ [4m]

- 13) Mr Koh went to 3 shops with some money. At each shop, he spent \$10 more than half of what he had when he entered. He did not have any money left in the end. How much did Mr Koh have before he entered the first shop?

Ans: _____ [4m]

14)

$$A : (B + C) = 1 : 2$$

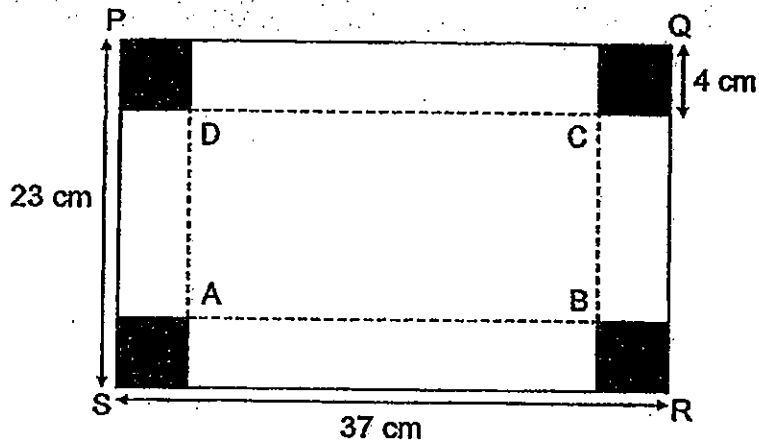
$$C : (B + D) = 1 : 3$$

$$A : D = 2 : 3$$

Based on the above ratios, find the ratio of A : B : C : D.

Ans: _____ [4m]

- 15) In the diagram below, not drawn to scale, PQRS is a rectangular piece of cardboard. 4 shaded squares are cut off and the remaining piece is folded along the dotted line to make an open box with rectangular base ABCD.
- What is the length of AB?
 - What is the volume of the open box?
 - Find the maximum number of 2-cm cubes that can be put into the box.



Ans: (a) _____ [1m]

(b) _____ [2m]

(c) _____ [2m]

- 16) Balloons were used to decorate 8 big rooms and 3 small rooms. All big rooms had the same number of balloons and each small room was decorated with an equal number of balloons. $\frac{3}{17}$ of the balloons were used to decorate the small rooms. If each big room had 15 more balloons than each small room, find the total number of balloons used.

Ans: _____ [5m]

- 17) May spent a total of \$69 on some rulers, pens and erasers. 25% of them were rulers and cost 90¢ each. The number of pens was 6 more than half the total number of items and the remaining were erasers. If a pen cost \$2.20 and an eraser cost 70¢, find the total number of pens May bought.

Ans: _____ [5m]

- 18) At first, 25% of Charles' money was the same as $\frac{1}{3}$ of June's money. Then, June's father gave her \$80 while Charles spent \$150.

In the end, June had $2\frac{1}{2}$ times as much money as Charles.

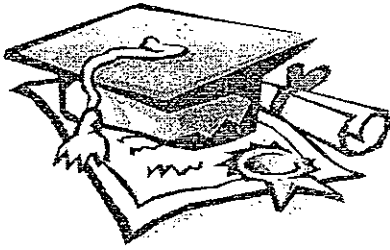
- (a) How much money did Charles have at first?
(b) How much money did June have in the end?

Ans: (a) _____ [2m]

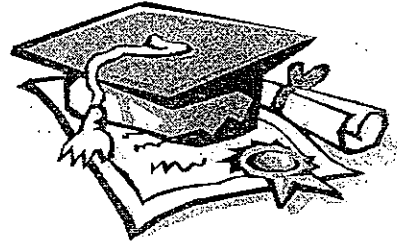
(b) _____ [3m]

- END OF PAPER 2 -





ANSWER SHEET



EXAM PAPER 2013

SCHOOL : TAO NAN PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATHEMATICS
TERM : SA1

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
2	4	4	2	1	4	4	1	3	3	1	2	2	3	3	

16. 1.019 , 10.1, 10.109, 10.19

17. 20

18. 5

19.

$5\frac{1}{25}$

20. 890

21. 4min

22. 10

23. 39

24. 9

25. 35: 32

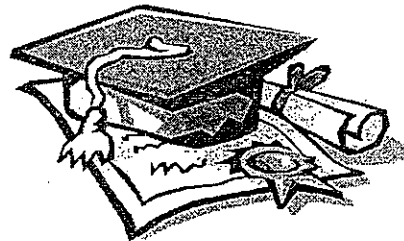
26. 60

27. 8cm

28. 18

29. 360

30. 209



Paper 2

1.

2. $6924 - 6789 = 135$

15% --- 135

5% --- 45

100% --- 900

3. $5 + 3 + 3 = 11$

$11 \times 3 = 33$

4. $2 \times 3 = 6$

$6u - 2u = 4u$

$4u = 8$

$1u = 2$

5. $5 - 0.5b$

6. $180 - 62 = 118$

$118 \div 2 = 59$

$90 - 59 = 31$

$31 + 87 = 118$

$180 - 118 = 62$

$62 + 90 = 152$

$180 - 152 = 28$

7. $70 \div 2 = 35$

$35 \times 9 = 315$

$315 \div 3 = 105$

$105 \times 5 = 525$

8. $150 \div 6 = 25$

$\sqrt{25} = 5$

$5 \times 2 = 10$

$10 \times 10 \div 2 = 50$

9. $3u - 1p + 21$

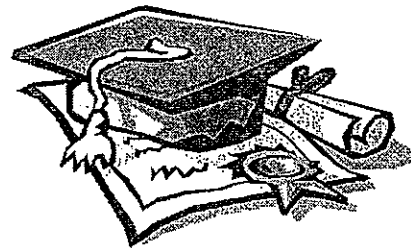
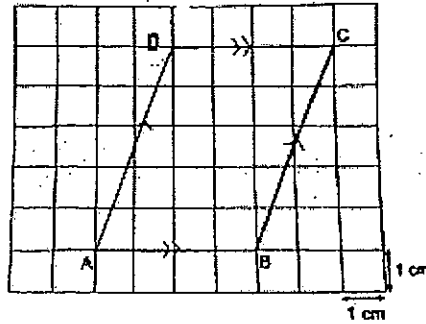
$2u - 3p$

$1u - 1.5p$

$3u - 4.5p$

$4.5p - 1p = 3.5p$

$3.5p = 21$



$$1p - 6$$

$$4p - 24$$

$$6 + 21 = 27$$

$$27 \div 3 = 9$$

$$9 \times 5 = 45$$

$$45 + 24 = 69$$

$$10. 93.25 \times 4 = 373$$

$$90 + 95 = 185$$

$$373 - 185 = 188$$

$$188 - 10 = 178$$

$$178 \div 2 = 89$$

$$89 + 10 = 99$$

$$11. 5 + 1 = 6$$

$$42 - 6 = 36$$

$$36 \text{ km} - 1 \text{ hr } 30 \text{ mins}$$

$$12 \text{ km} - 30 \text{ mins}$$

$$24 \text{ km} - 1 \text{ hr}$$

$$12. 4 \times 4 \text{ pie} = 16 \text{ pie}$$

$$4 \times 8 = 32$$

$$16 \text{ pie} \div 4 = 4 \text{ pie}$$

$$32 \div 2 = 16$$

$$4 \times 4 = 16$$

$$16 - 4 \text{ pie} = A$$

$$16 - (16 - 4 \text{ pie}) = 4 \text{ pie}$$

$$13. 20 + 10 = 30$$

$$30 = \text{half of money at } 2^{\text{rd}} \text{ stall}$$

$$60 = \text{amount of money at } 2^{\text{nd}} \text{ stall}$$

$$\$60 + 10 = 70$$

$$\$70 = \text{half of } 1^{\text{st}} \text{ stall}$$

$$140 = 1^{\text{st}} \text{ stall}$$

$$14. 21u - 12u = 9u$$

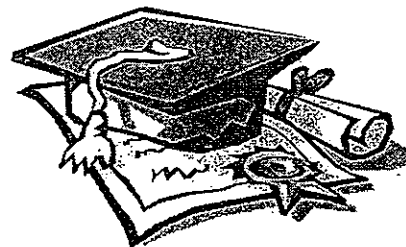
$$9u - B$$

$$16 - 9u = 7u$$

$$7u - C$$

$$A : B : C : D$$

$$8 : 9 : 7 : 12$$



15. a. $4 \times 2 = 8$

$37 - 8 = 29$

b. $23 - 8 = 15$

$29 \times 15 \times 4 = 1740$

c. $29 \div 2 = 14R1$

$15 \div 2 = 7R1$

$14 \times 7 \times 2 = 196$

16. $17 - 3 = 14$

$14/17 \div 8 = 7/68$

1 big room --- $7/68$ of balloons

$1/17 = 4/68$

$7 - 4 = 3$

15 balloons - $3/68$ of balloons

$1/68$ of balloons --- 5 balloons

$68 \times 5 = 340$

17. $2.20 \times 6 = 13.20$

$69 - 13.20 = 55.80$

$0.7 \times 6 = 4.2$

$55.80 + 4.2 = 60$

$0.9 + 2.2 + 2.2 + 0.7 = 6$

$60 \div 6 = 10$

$10 \times 2 = 20$

$20 + 6 = 26$

18. a. $4 \times 2.5 = 10$

$150 \times 2.5 = 375$

$10u - 375 = 3u + 80$

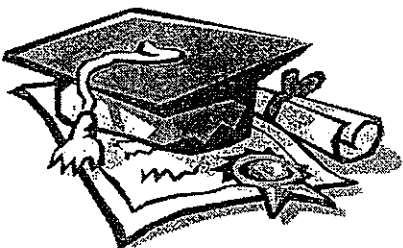
$7u - 455$

$1u - 65$

$4u - 260$

b. $3u - 195$

$195 + 80 = 275$



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Anglo-Chinese School (Junior)/
Anglo-Chinese School (Primary)



COMBINED PRELIMINARY EXAMINATION (2013)
PRIMARY 6

MATHEMATICS

PAPER 1
Booklet A

Friday

23 AUGUST 2013

50 min

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. You are not allowed to use a calculator.

Name : _____ ()

Class : 6.()

Parent's Signature: _____

This question paper consists of 8 printed pages. (Inclusive of cover page)

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). (20 marks)

1. What is 392 458 rounded off to the nearest hundred?

- 1) 392 000
- 2) 392 400
- 3) 392 460
- 4) 392 500

2. Which of these has the smallest value?

- 1) $\frac{1}{5}$
- 2) $\frac{2}{7}$
- 3) 0.5
- 4) 0.27

3. Which one of the following pairs of numbers has common factors 1, 3 and 9 only?

- 1) 9 and 24
- 2) 12 and 18
- 3) 12 and 24
- 4) 18 and 27

4. The average mass of 3 boys weighing 34 kg, 35 kg and x kg is 33 kg. What is the value of x ?

- 1) 27
- 2) 30
- 3) 36
- 4) 34

5. Mrs Loh bought $9k$ pens. She gave 2 pens to each of her pupils and had $4k$ pens left. Express the number of pupils Mrs Loh had in terms of k .

- 1) $\frac{5k}{2}$
- 2) $\frac{13k}{2}$
- 3) $\frac{9k-2}{4k}$
- 4) $\frac{9k+2}{4k}$

6. $341.059 = 300 + 40 + \boxed{} + 0.05$

The missing value in the box is _____.

- 1) 0.09
- 2) 0.009
- 3) 1.009
- 4) 1.059

7. Derrick left for his tennis training and his watch showed 9.35 a.m. He took 35 minutes to travel to his tennis training venue. He then realised that his watch was 10 minutes slow. What was the actual time he reached the training venue?

- 1) 9.50 a.m.
- 2) 10.10 a.m.
- 3) 10.20 a.m.
- 4) 10.30 a.m.

8. The table below shows the age of 4 boys. Whose age is the nearest to their average age?

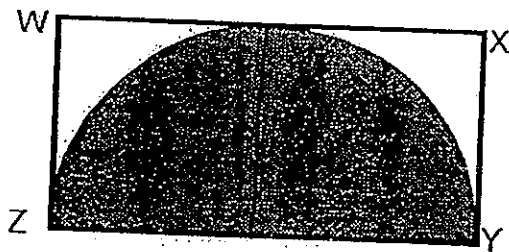
Name	Age in Years
Alvin	11
Bobby	12
Calvin	13
Danny	15

- 1) Alvin
- 2) Bobby
- 3) Calvin
- 4) Danny

9. The ratio of the number of marbles Frederick has to the number of marbles Gregory has is 5 : 8. If Frederick has 90 marbles, how many marbles must Gregory give to Frederick so that they both have the same number of marbles?

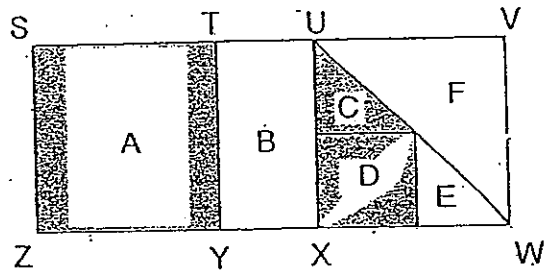
- 1) 18
- 2) 27
- 3) 90
- 4) 144

10. The area of rectangle WXYZ is 98 cm^2 . Find the radius of the semi-circle. (Take $\pi = \frac{22}{7}$)

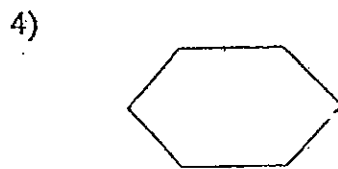
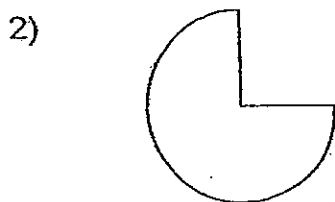
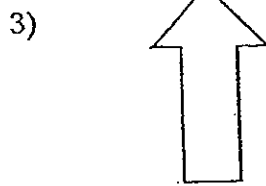
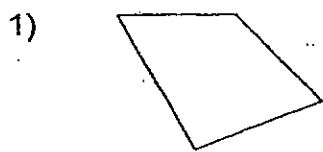


- 1) 7 cm
- 2) 14 cm
- 3) 22 cm
- 4) 44 cm

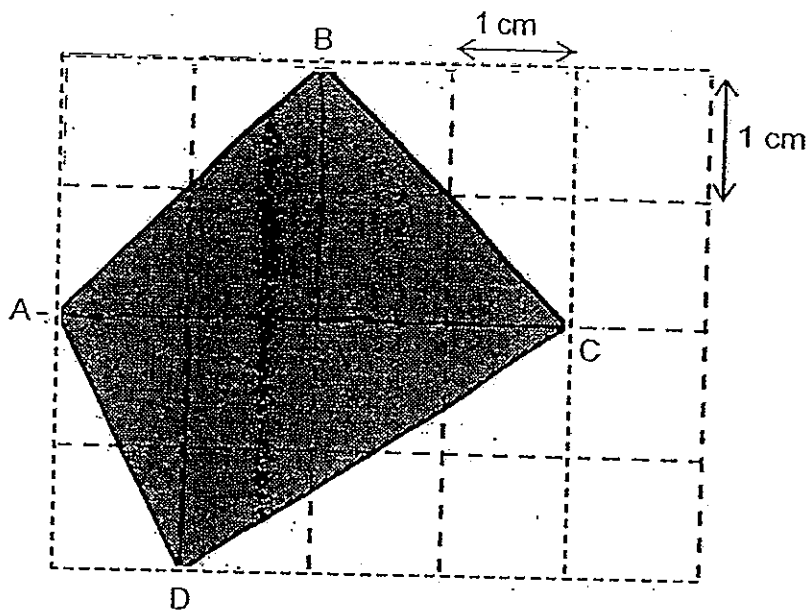
11. The figure below is made up of 2 identical squares STYZ and UVWX and a rectangle TUXY. Area A is twice the Area of B and Area D is half of Area F. What fraction of the figure is shaded?



- 1) $\frac{3}{5}$
 2) $\frac{3}{10}$
 3) $\frac{9}{20}$
 4) $\frac{11}{20}$
12. Which one of the following figures has more than one line of symmetry?

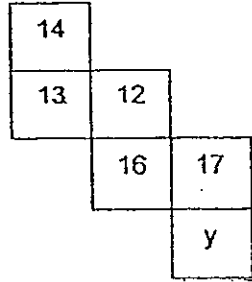


13. Quadrilateral ABCD is drawn on a 1-cm square grid. Find the area of ABCD.



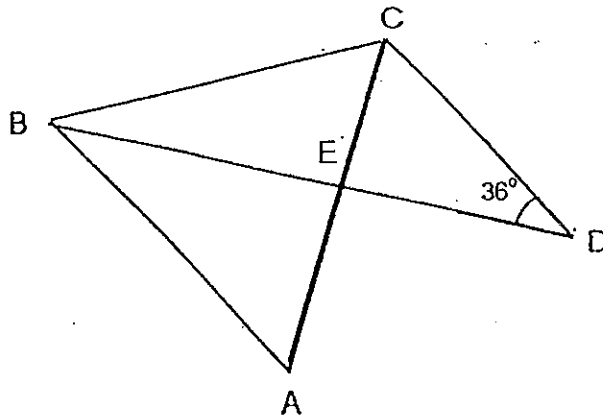
- 1) 6 cm^2
- 2) 8 cm^2
- 3) 12 cm^2
- 4) 20 cm^2

14. The figure below shows the net of a cube. The average of each pair of numbers on opposite faces is the same. What is the missing number represented by the face marked 'y'?



- 1) 11
- 2) 15
- 3) 18
- 4) 19

15. In the figure below, ABC is an equilateral triangle and CD and BD are straight lines. CD is parallel to AB. $\angle CDE$ is 36° . Find $\angle DEA$.



- 1) 36°
- 2) 84°
- 3) 96°
- 4) 144°

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Anglo-Chinese School (Junior)/
Anglo-Chinese School (Primary)



COMBINED PRELIMINARY EXAMINATION (2013)
PRIMARY 6

MATHEMATICS

PAPER 1
Booklet B

Friday

23 AUGUST 2013

50 min

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. You are not allowed to use a calculator.

Name : _____ ()

Class : 6.()

Parent's Signature: _____

Booklet	Possible Marks	Marks Obtained
A	20	
B	20	
TOTAL	40	

This question paper consists of 8 printed pages. (Inclusive of cover page)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

16. Express $2\frac{3}{7}$ as a decimal. (Round off your answer to 2 decimal places.)

Answer: _____

17. $8 \times 1\frac{1}{6} = 1\frac{1}{6} + 1\frac{1}{6} + 2\frac{1}{3} + \boxed{}$

What is the missing value in the box?

Answer: _____

18. What is the quotient when 2397 is divided by 23?

Answer: _____

19. Sheena is y years old. Mary is three times as old as Sheena and Mary is 4 years younger than Peiqi. What is Peiqi's age in terms of y ?

Answer: _____

20. 1 kg of tomatoes costs \$2.40.
6 kg of such tomatoes cost as much as 800g of cherries.
How much does 100 g of cherries cost?

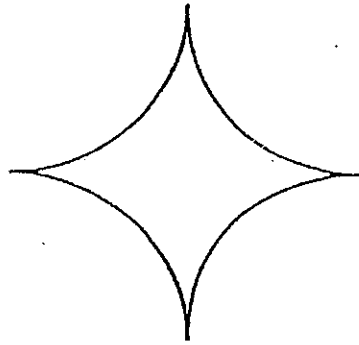
Answer: \$ _____

21. Helen had a roll of ribbon 3 m 4 cm long. She cut off 18.7 cm of the ribbon to tie a parcel. What was the length of the remaining ribbon? Leave your answer in centimetres.

Answer: _____ cm

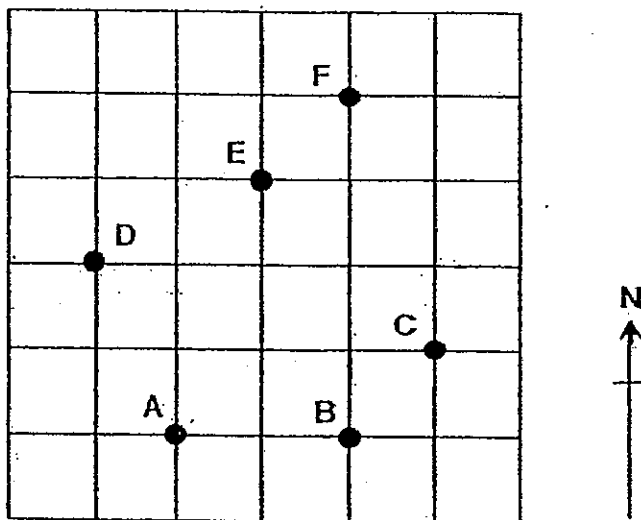
22. A circular hoop of radius 10 cm is cut into 4 equal pieces and rearranged to make the shape as shown. What is the perimeter of the shape?

(Take $\pi = 3.14$.)



Answer: _____ cm

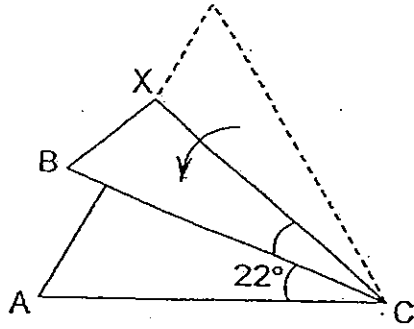
- 23.



Refer to the square grid above and fill in the blanks with A, B, C, D, E or F.

Point _____ is south-east of point _____

24. The figure below shows an equilateral triangular piece of paper folded along line CX . $\angle ACB$ is 22° . Find $\angle BCX$.



Answer: _____^o

25. Add one square to Figure Q so that the new Figure Q has the same area and perimeter as Figure P. Shade the square drawn.

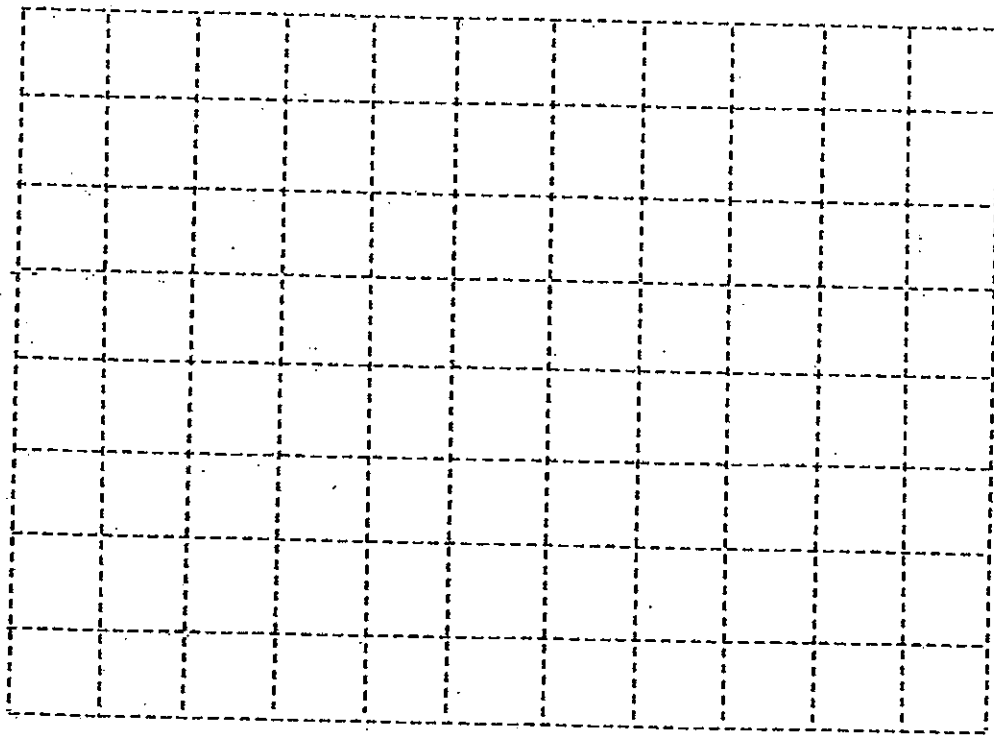


Figure P

Figure Q

Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which requires units, give your answers in the units stated. (10 marks)

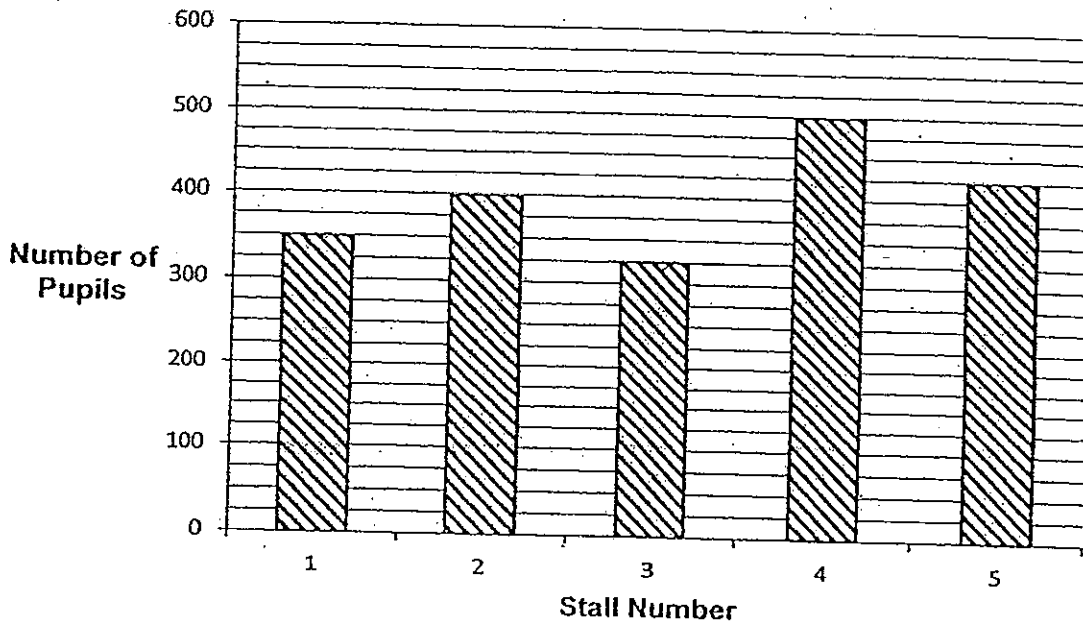
26. Kelvin bought 8 identical erasers and 5 identical files. Each eraser cost \$ p . Each file cost \$1.30 more than an eraser. How much did he pay altogether?
Give your answer in terms of p .

Answer: \$ _____

27. What is the greatest number of $\frac{1}{4}$ -m pieces of ribbon Jenny can cut from $\frac{9}{10}$ m of ribbon?

Answer: _____

28. The graph below shows the number of pupils who shopped at the 5 stalls in a certain school on Friday. Study the graph carefully and answer the questions.



- a) How many more pupils preferred stall 5 to stall 3?

Answer: _____

- b) What was the percentage of the pupils who shopped at stall 4?

Answer: _____ %

29. The bill for a meal in a restaurant was \$53.50, inclusive of 7% Goods and Services Tax (GST). Find the price of the meal before GST.

Answer : \$ _____

30. Mavis wants to buy 9 bars of chocolate but she is short of \$2.50. If she buys 2 bars of chocolate, she will have \$5.20 left. How much does each bar of chocolate cost?

Answer: \$ _____

End of Paper 1

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Anglo-Chinese School (Junior)/
Anglo-Chinese School (Primary)



COMBINED PRELIMINARY EXAMINATION (2013)
PRIMARY 6

MATHEMATICS

PAPER 2

Friday

23 AUGUST 2013

1hr 40 min

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so
2. Follow all instructions carefully.
3. Answer all questions.
4. Show all your workings as marks are awarded for correct working.
5. Write your answers in this booklet.
6. You are allowed to use a calculator.

Name : _____ ()

Class : 6.()

Parent's Signature: _____

Paper	Possible Marks	Marks Obtained
1	40	
2	60	
TOTAL	100	

This question paper consists of 15 printed pages. (Inclusive of cover page)

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers to the units stated. (10 marks)

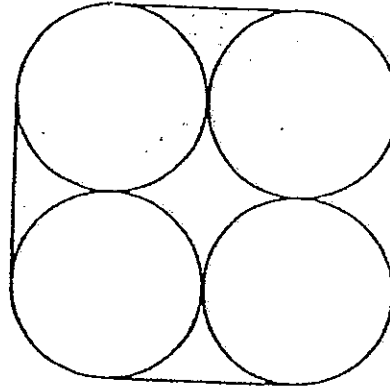
1. A rectangular tank measures 30 cm by 25 cm by 8 cm. Water from a tap flows into the rectangular tank at a rate of 180 cm^3 per minute. How long does it take to fill $\frac{3}{4}$ of the tank?

Answer: _____ min

2. Ethan scored an average of 75 marks for Mathematics and Science. He scored an average of 86 marks for Mathematics and English. How many more marks did he score in English than in Science?

Answer: _____

3. A rubber band is used to secure the position of four identical circular discs. The diameter of each circular disc is 10 cm. Use the calculator value of π to find the length of the rubber band, correct to 2 decimal places.

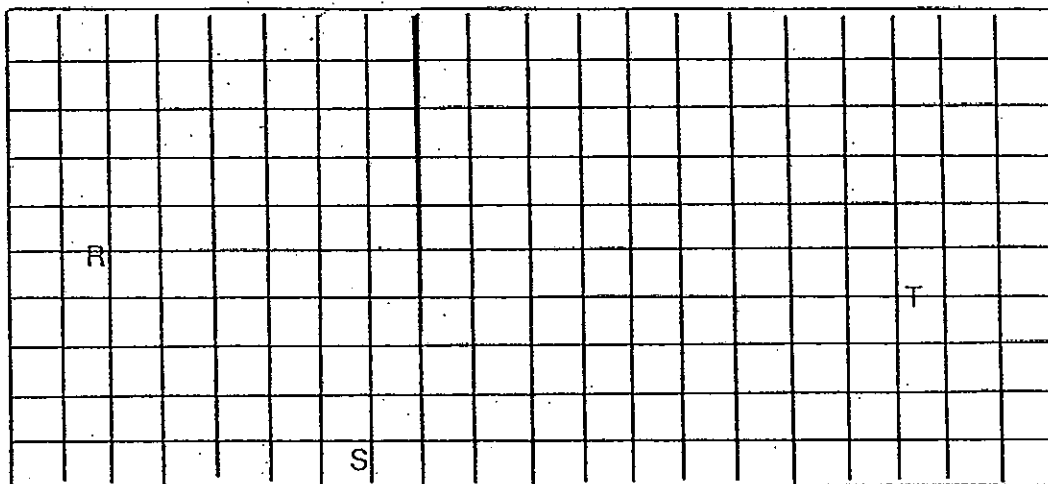


Answer: _____ cm

4. A group of people went on a trip to Malaysia. $\frac{1}{3}$ of the males and $\frac{1}{4}$ of the females were children. There were 32 children altogether and $\frac{3}{8}$ of them were girls. What fraction of the people were children?
(Give your answer in its simplest form.)

Answer: _____

5. RS and ST are two sides of a parallelogram. Complete and label the parallelogram RSTU by drawing the other two sides in the square grid below.



For questions 6 to 18, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

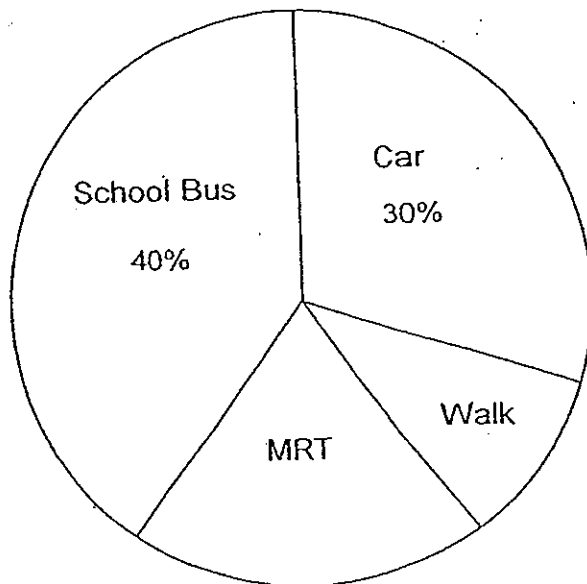
6. A box with 68 identical mugs weighs 18 kg. The same box when filled with 56 identical mugs weighs 15.03 kg. What is the mass of the empty box in kilogrammes?
(Round off your answer to the nearest 1 decimal place)

Answer: _____ [3]

7. A sum of money was shared among Andy, Bobby and Carl such that Andy received $\frac{1}{4}$ of the sum and the remainder was shared between Bobby and Carl in the ratio 3 : 2. Find the ratio of the amount of money Andy had to the amount of money Bobby had to the amount of money Carl had.

Answer: _____ [3]

8. The pie chart below shows how pupils of ABC school travel to school daily. Study the pie chart below carefully and answer the questions.



- a) If 810 pupils go to school by car, what is the enrolment of ABC school?
- b) If the number of pupils who travel to school by MRT is twice those who walk to school, how many pupils walk to school?
- c) What fraction of the pupils in ABC school go to school by MRT?

Answer: (a) _____ [1]

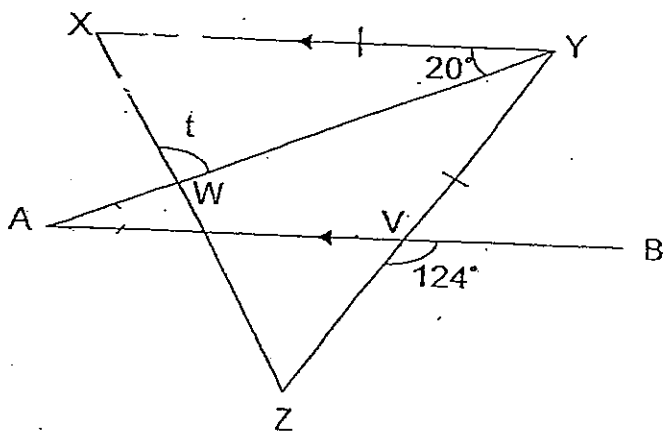
(b) _____ [1]

(c) _____ [1]

9. Mrs Lim sold her curry puffs at \$1.40 each in the afternoon. At night, she still had 63 curry puffs left. She decided to reduce the cost of each curry puff by fifty cents. She managed to sell all the remaining curry puffs before she closed her shop. She collected a total of \$409.50. How many curry puffs did she sell in the afternoon?

Answer: _____ [3]

10. In the figure below, XYZ is an isosceles triangle. $XY = YZ$ and $AB \parallel \overleftrightarrow{YZ}$. AWY and AVB are straight lines. Find $\angle t$.

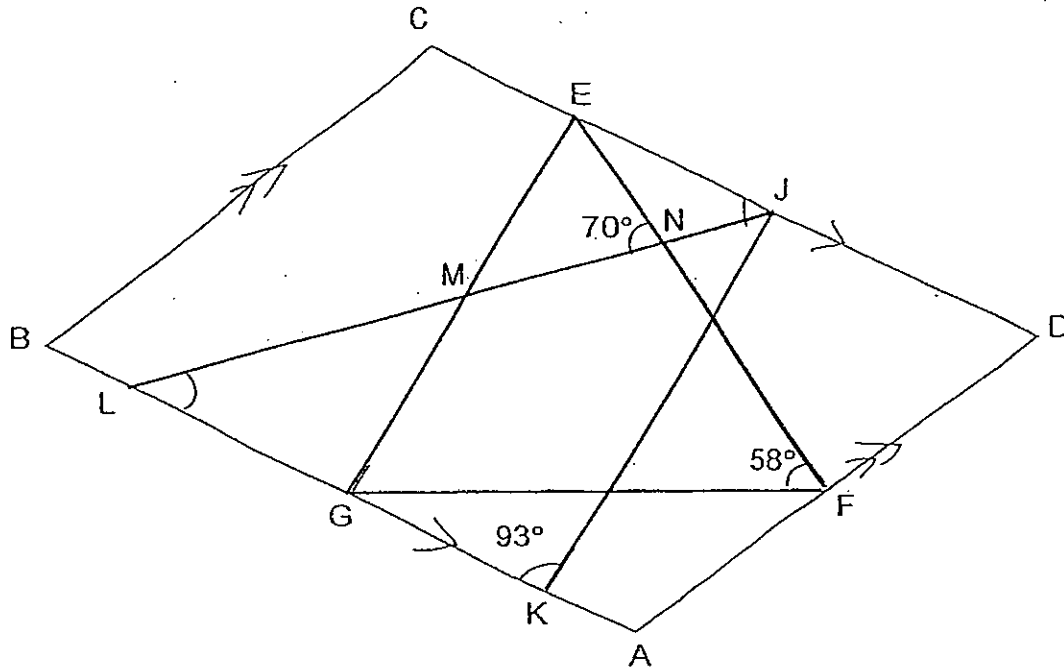


Answer: _____ [3]

11. The figure below is not drawn to scale. ABCD is a parallelogram. EFG and JKL are triangles. EG is parallel to JK and EF = FG. $\angle JKG = 93^\circ$, $\angle ENL = 70^\circ$ and $\angle EFG = 58^\circ$

(a) Find $\angle EJK$.

(b) Find $\angle JLK$.



Answer: (a) _____ [1]

(b) _____ [3]

12. Aminah and Benjamin were travelling on the same route to Town X. Benjamin overtook Aminah when they were 168 km from Town X. When Benjamin reached Town X, Aminah was still 21 km away from Town X. 20 minutes later, Aminah reached Town X.

- (a) What was the average speed of Aminah?
- (b) What was the average speed of Benjamin?

Answer: (a) _____ [1]

(b) _____ [3]

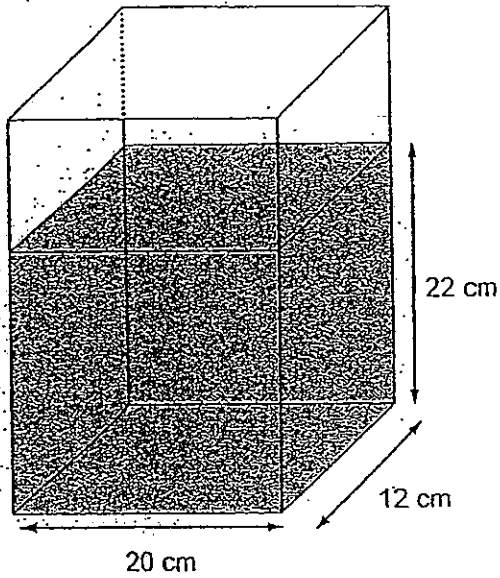
13. Tank A and Tank B are regular containers. Tank A was filled with water to a height of 22 cm.

a) What was the volume of water in Tank A at first?

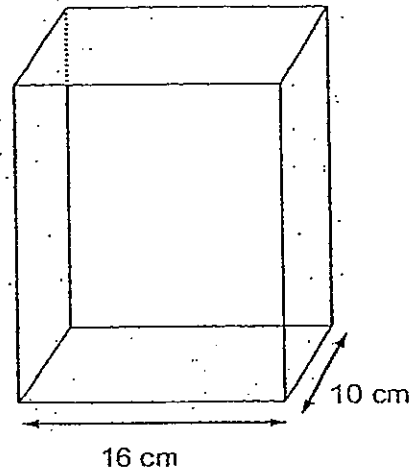
the water in

b) The water in Tank A was poured into Tank B such that the height of Tank A was 3 times the height of Tank B. Find the volume of water poured out of Tank B

the water in



Tank A



Tank B

Answer : (a) _____ [1]

(b) _____ [3]

14. The chairs in a school auditorium were previously arranged in rows such that there were exactly 15 chairs in each row for a concert. After the concert, the school attendants removed 6 chairs from the auditorium and rearranged the remaining chairs for a briefing. There are now exactly 12 chairs in each row and 9 more rows than before. How many chairs were there in the auditorium for the briefing?

Answer: _____ [4]

15. Lydia made some tarts to sell. $\frac{4}{5}$ of them were mango tarts and the rest were kiwi tarts. After selling 125 kiwi tarts and $\frac{5}{8}$ of the mango tarts, she had $\frac{1}{3}$ of the tarts left. How many tarts did she sell?

Answer: _____ [4]

16. Mr Wang had thrice as many ten-dollar notes as five-dollar notes at first. He used twice as many five-dollar notes as ten-dollar notes to pay for a mobile phone which cost \$280. Then he realised that the number of five-dollar notes left was $\frac{1}{5}$ of the number of ten-dollar notes left.

(a) How many pieces of five-dollar notes did Mr Wang have at first?

(b) How much money had he left after buying the mobile phone?

Answer: (a) _____ [3]

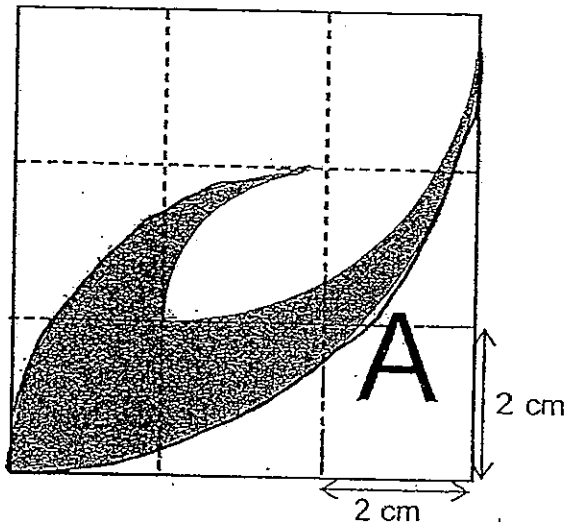
(b) _____ [2]

17. Jeremy had a total of 60 figurines of Smurf, Lego and Ironman. The ratio of the number of Smurf figurines to Lego figurines to Ironman figurines was 2 : 7 : 3. He bought another 36 figurines. As a result, the number of Smurf figurines was increased by 50% and the number of Lego figurines was increased by 20%. Find the percentage increase in the number of Ironman figurines.

Answer: _____ [5]

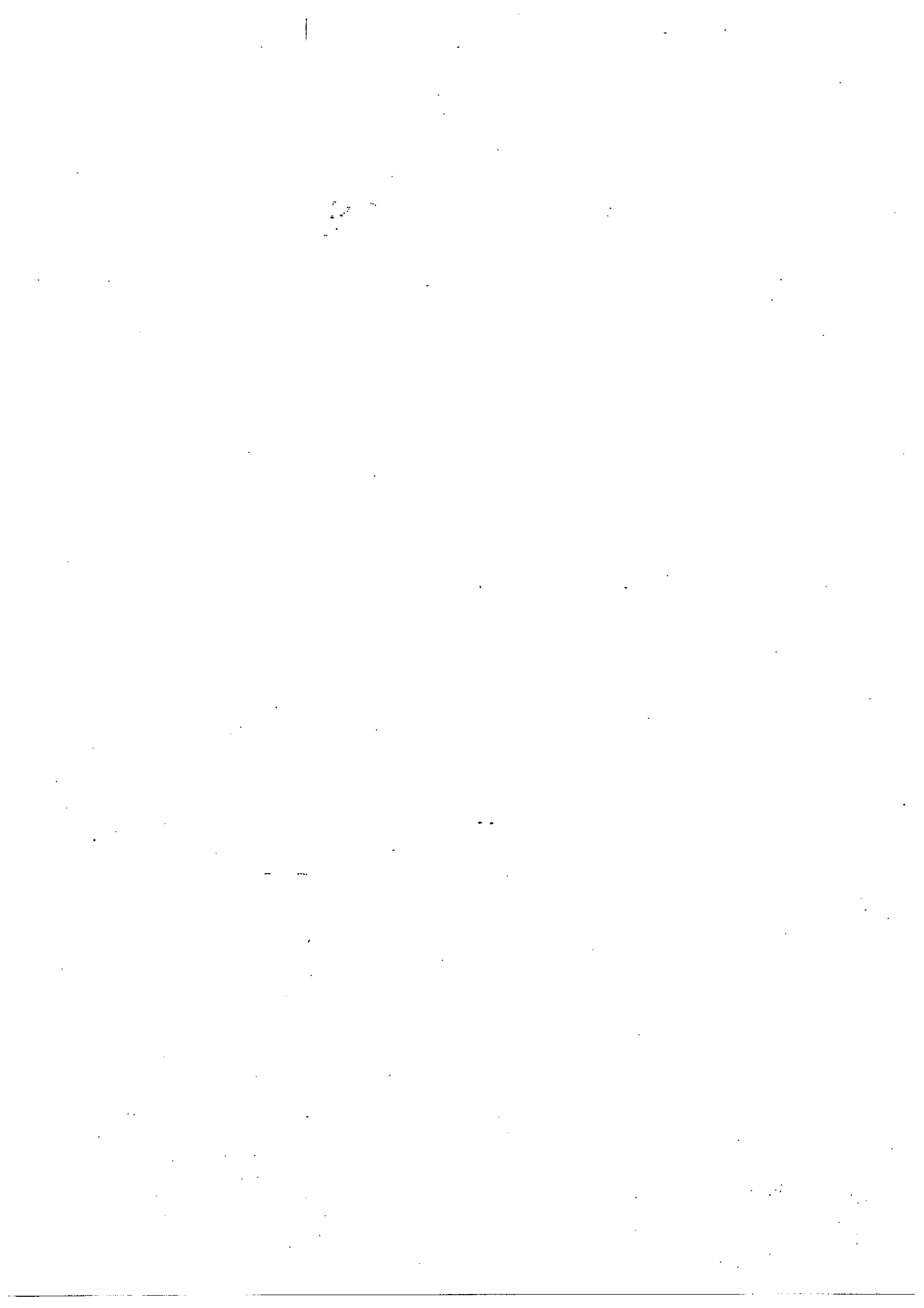
18 The figure below is created with 4 quarter circles and a square.

- (a) The unshaded part marked A is enclosed by the square and a quarter circle. Find the area of A.
- (b) Find the area of the shaded figure.
(Take $\pi = 3.14$)



Answer: A: _____ [1]

B: _____ [4]



Anglo-Chinese School
 Combined Preliminary Examination 2013
 Primary Six Mathematics
 Booklet A

1)	4	4)	2	7)	3	10)	1	13)	2
2)	1	5)	1	8)	3	11)	4	14)	3
3)	4	6)	3	9)	2	12)	4	15)	3

16) 2.43 17) $4\frac{2}{3}$ 18) 104 19) $(3y + 4)$ 20) 1.80

21) 285.3 22) 62.8 23) C, E 24) 19 25)

26) $8 + 5 = 13$
 $13 \times \$p = \$13p$
 $\$1.30 \times 5 = \6.50
 $\$13p + \$6.50 = \underline{\underline{\$(13p + 6.50)}}$

27) $\frac{1}{4}m = 25\text{cm}$
 $\frac{9}{10}m = 90\text{cm}$
 $90\text{cm} \div 25\text{cm} \approx \underline{\underline{3}}$

28a) $425 - 325 = \underline{\underline{100}}$

28b) $350 + 400 + 325 + 500 + 425 = 2000$
 $500 \div 2000 = \underline{\underline{25\%}}$

29) $\$53.50 \div 1.07 = \underline{\underline{\$50}}$

30) $\$5.20 + \$2.50 = 9c - 2c$
 $7c = \$7.70$
 $1c = \underline{\underline{\$1.10}}$

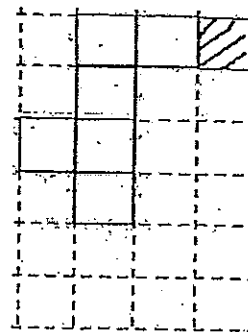


Figure Q

Booklet B

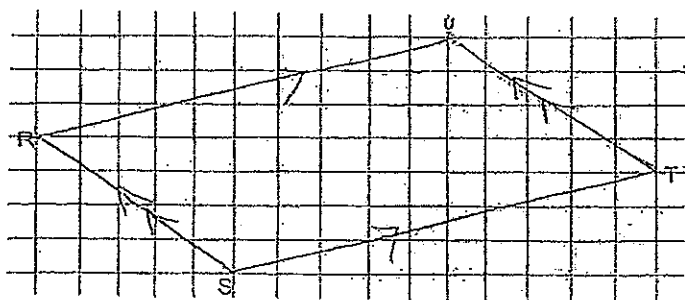
1) $30 \times 25 \times 8 \times \frac{3}{4} = 4500\text{cm}^3$
 $4500\text{cm}^3 \div 180\text{cm}^3 = \underline{\underline{25}}$

2) $75 \times 2 = 150$
 $86 \times 2 = 172$
 $172 - 150 = \underline{\underline{22}}$

3) $20\text{cm} \times \pi = 20\pi \text{ cm}$
 $20\pi \text{ cm} + 80\text{cm} = (20\pi + 80) \text{ cm}$
 $(20\pi + 80)\text{cm} \div 2 = (10\pi + 40)\text{cm}$
 $(10\pi + 40) \text{ cm} \approx \underline{\underline{71.42}}$

4) $32 \times \frac{3}{8} = 12$
 $32 - 12 = 20$
 $20 \times 3 = 60$
 $12 \times 4 = 48$
 $48 + 60 = 108$
 $\frac{32}{108} = \frac{8}{27}$

5)



- 6) $18\text{kg} - 15.03\text{kg} = 2.97\text{kg}$
 $68 - 56 = 12$
 $2.97\text{kg} \div 12 = 0.2475\text{kg}$
 $0.2475\text{kg} \times 68 = 16.83\text{kg}$
 $18\text{kg} - 16.83\text{kg} = \underline{1.17\text{kg}}$
- 8) $810 \div 30 = 27$
a) $27 \times 100 = \underline{2700}$
 $100 - 30 - 40 = 30\%$
b) $810 \div 3 = \underline{270}$
c) Walk = MRT (20%) $\div 2 = 10\%$
 $10\% = \underline{\frac{1}{10}}$
- 10) $\angle AYZ = 180^\circ - 20^\circ - 124^\circ = 36^\circ$
 $\angle YXZ + \angle XYZ = 180^\circ - 20^\circ - 36^\circ = 124^\circ$
 $\angle YXZ = 124^\circ \div 2 = 62^\circ$
 $\angle t = 180^\circ - 62^\circ - 20^\circ = \underline{98^\circ}$
- 12) $21\text{km} \div 20\text{min} = 1.05\text{km}$
a) $1.05\text{km} \times 60\text{mins} = \underline{63\text{km/h}}$
 $168\text{km} \div 63\text{km/h} = 2\text{hr } 40\text{mins}$
 $2\text{hr } 40\text{mins} - 20\text{mins} = 2\text{hr } 20\text{mins}$
b) $168\text{km} \div 2\text{hr } 20\text{mins} = \underline{72\text{km/h}}$
- 14) $15 - 12 = 3$
 $12 \times 9 = 108$
 $108 + 6 = 114$
 $114 \div 3 = 38$
 $38 \times 15 = 570$
 $570 - 6 = \underline{564}$
- 7) A : B + C : T
1 : 3 : 4
5 : 15 : 20
Ratio = 5 : 9 : 6
- B : C : T
3 : 2 : 5 $\times 3$
9 : 6 : 15
- 9) $\$1.40 - \$0.50 = \$0.90$
 $\$0.90 \times 63 = \56.70
 $\$409.50 - \$56.70 = \$352.80$
 $\$352.80 \div \$1.40 = \underline{252}$
- 11) $\angle EJK + \angle JKG = 360^\circ - 180^\circ = 180^\circ$
a) $\angle EJK = 180^\circ - 93^\circ = \underline{87^\circ}$
 $\angle EMN = 180^\circ - 61^\circ - 70^\circ = 49^\circ$
 $180^\circ - 58^\circ = 122^\circ$
 $122^\circ \div 2 = 61^\circ$
 $\angle FGA = 180^\circ - 93^\circ - 61^\circ = 26^\circ$
 $\angle MGL = 180^\circ - 26^\circ - 70^\circ = 84^\circ$
b) $\angle JLK = 180^\circ - 49^\circ - 93^\circ = \underline{38^\circ}$
- 13a) $22\text{cm} \times 12\text{cm} \times 20\text{cm} = \underline{5280\text{cm}^3}$
 $20\text{cm} \times 12\text{cm} \times 3\text{cm} = 720\text{cm}^3$
 $16\text{cm} \times 10\text{cm} \times 1\text{cm} = 160\text{cm}^3$
 $720\text{cm}^3 + 160\text{cm}^3 = 880\text{cm}^3$
 $5280\text{cm}^3 \div 880\text{cm}^3 = 6$
b) $6 \times 160\text{cm}^3 = \underline{960\text{cm}^3}$
- 15) $\frac{2}{3} \times \frac{3}{4} = \frac{1}{2}$
 $1 - \frac{1}{3} = \frac{2}{3}$
 $\frac{2}{3} - \frac{1}{2} = \frac{1}{6}$
 $125 \times 6 = 750$
 $750 \times \frac{1}{6} = \underline{500}$

$$16) \quad \$5 \times 2 = \$10$$

$$\$10 + \$10 = \$20$$

$$\$280 \div \$20 = 14$$

$$14 \times 2 = 28$$

$$3u - 14 = 5p$$

$$1u - 28 = 1p \quad (\times 3)$$

$$3u - 84 = 3p$$

$$5p - 3p = 2p$$

$$84 - 14 = 70$$

$$70 \div 2p = 35$$

$$a) \quad 35 + 28 = \underline{63}$$

$$63 \times 3 = 189$$

$$189 \times \$10 = \$1890$$

$$63 \times \$5 = \$315$$

$$\$1890 + \$315 = \$2205$$

$$b) \quad \$2205 - \$280 = \underline{\$1925}$$

$$17) \quad 2 + 7 + 3 = 12$$

$$60 \div 12 = 5$$

$$5 \times 2 = 10$$

$$10 \times \frac{1}{2} = 5$$

$$7 \times 5 = 35$$

$$35 \times \frac{1}{5} = 7$$

$$5 + 7 = 12$$

$$36 - 12 = 24$$

$$3 \times 5 = 15$$

$$\frac{24}{15} \times 100 = \underline{160\%}$$

$$18) \quad 6\text{cm} \times 6\text{cm} \times \frac{1}{4} \times 3.14 = 28.26\text{cm}^2$$

$$6\text{cm} \times 6\text{cm} = 36\text{cm}^2$$

$$a) \quad 36\text{cm}^2 - 28.26\text{cm}^2 = \underline{7.74\text{cm}^2}$$

$$4\text{cm} \times 4\text{cm} \times 3.14 \times \frac{1}{4} = 12.56\text{cm}^2$$

$$4\text{cm} \times 4\text{cm} = 16\text{cm}^2$$

$$16\text{cm}^2 - 12.56\text{cm}^2 = 3.44\text{cm}^2$$

$$2\text{cm} \times 4\text{cm} = 8\text{cm}^2$$

$$36\text{cm}^2 - 3.44\text{cm}^2 - 8\text{cm}^2 = 24.56\text{cm}^2$$

$$24.56\text{cm}^2 - 7.74\text{cm}^2 = 16.82\text{cm}^2$$

$$2\text{cm} \times 2\text{cm} = 4\text{cm}^2$$

$$12.56\text{cm}^2 - 4\text{cm}^2 = 8.56\text{cm}^2$$

$$2\text{cm} \times 2\text{cm} \times 3.14 \times \frac{1}{4} = 3.14\text{cm}^2$$

$$12.82\text{cm}^2 - 3.14\text{cm}^2 - 8.56\text{cm}^2 = 5.12\text{cm}^2$$

$$b) \quad 5.12\text{cm}^2 + 4\text{cm}^2 = \underline{9.12\text{cm}^2}$$





新加坡福建会馆属下五校小六统一考试
道南 • 爱同 • 崇福 • 南侨 • 光华

SINGAPORE HOKKIEN HUAY KUAN
5-SCHOOL COMBINED PRIMARY 6 PRELIMINARY EXAMINATIONS
TAO NAN • AI TONG • CHONGFU • NAN CHIAU • KONG HWA

2013
数学 MATHEMATICS
PAPER 1
BOOKLET A

Date : 23 August 2013
Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

- ✓ Do not open this booklet until you are told to do so.
- ✓ Follow all instructions carefully.
- ✓ Answer all questions.
- ✓ Shade your answers in the Optical Answer Sheet (OAS) provided
- ✓ You are not allowed to use a calculator.

This booklet consists of 7 printed pages.

School : _____
Name : _____
Class : _____

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer
Sheet (OAS). (20 marks)

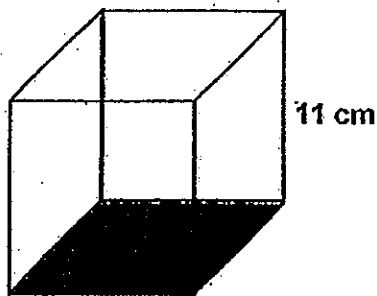
1. 12 is a multiple of _____.

- (1) 6
- (2) 8
- (3) 9
- (4) 24

2. Subtract 0.26 from 18 tenths.

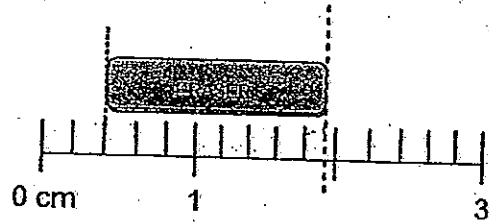
- (1) 0.08
- (2) 0.8
- (3) 1.54
- (4) 1.774

3. The figure below shows a cubical box with a height of 11 cm. What is the base area of the box?

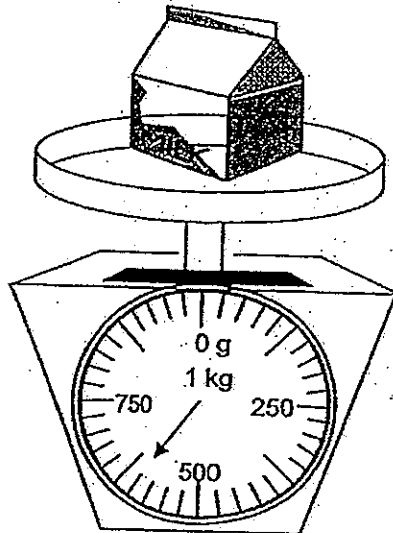


- (1) 22 cm^2
- (2) 33 cm^2
- (3) 121 cm^2
- (4) 1331 cm^2

4. What is the best estimate for the length of the eraser?

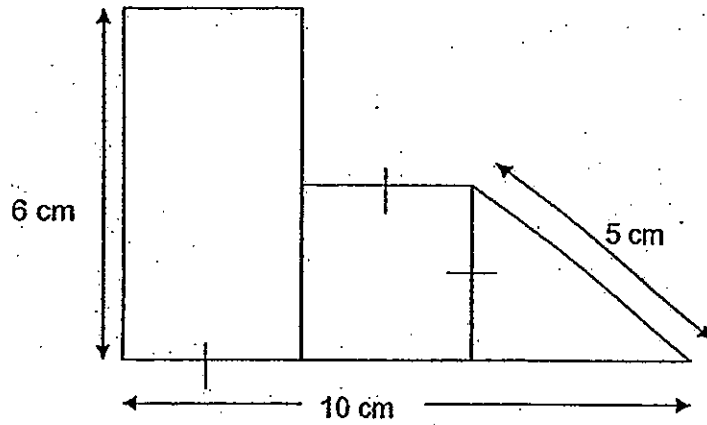


- (1) 1.2 cm
(2) 1.5 cm
(3) 1.9 cm
(4) 2.0 cm
5. The figure below shows a packet of milk on the weighing scale. What is the mass of 2 such packets of milk?

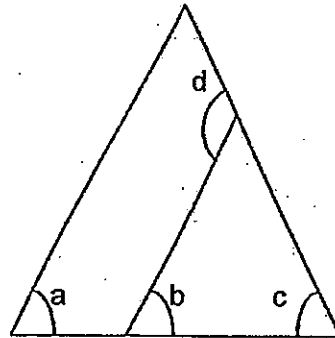


- (1) 1080 g
(2) 1150 g
(3) 1200 g
(4) 1250 g

6. The figure below is made up of a rectangle, a square and a triangle. Given that the length of the rectangle is twice its breadth, find the perimeter of the whole figure.

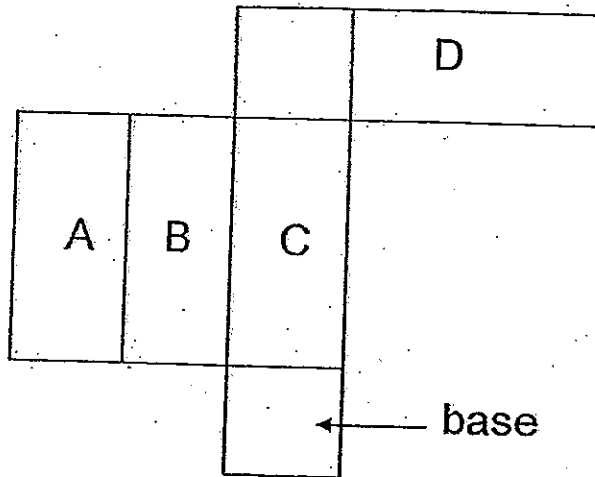


- (1) 21 cm
 (2) 27 cm
 (3) 30 cm
 (4) 33 cm
7. The figure below shows two triangles. Which one of the following statements is true about the figure?



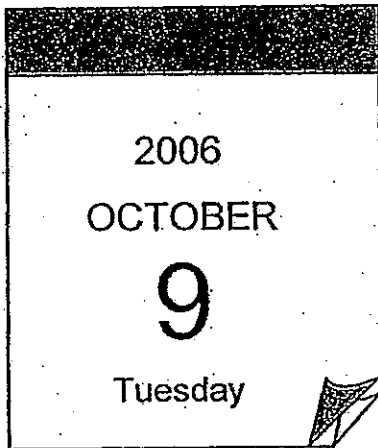
- (1) $\angle c + \angle d = \angle a$
 (2) $\angle b + \angle c = \angle d$
 (3) $\angle a + \angle b + \angle c = 180^\circ$
 (4) $\angle b + \angle c + \angle d = 180^\circ$

8. The figure below is a net of a cuboid. Name two faces of the cuboid that are opposite each other.

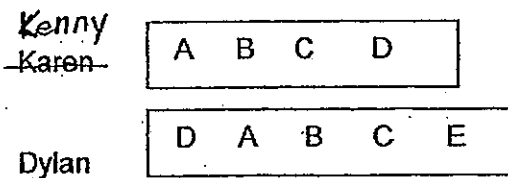


- (1) A and B
- (2) A and D
- (3) B and D
- (4) C and D

9. Amelia was born on the date as shown in the calendar below. Her cousin, Roy, was born 10 days before her. What day of the week was Roy's birthday?



- (1) Sunday
(2) Monday
(3) Friday
(4) Saturday
10. Kenny and Dylan each used some letters to make a set of patterns on rectangular cards as shown below. They make repeated patterns with the cards created.



Which letter will first appear in the same position in both patterns?

- (1) A
(2) B
(3) C
(4) D

11. There were 10 more boys than girls at an outing. Each boy was given 3 sweets and each girl was given 4 sweets. A total of 156 sweets were given to the children. How many boys were there at the outing?

- (1) 36
- (2) 28
- (3) 18
- (4) 8

12. Winnie is n years old. She is 3 times as old as Joyce. Amanda is 4 years younger than Joyce. How old is Amanda?

- (1) $\frac{n}{3} - 4$
- (2) $\frac{n}{3} + 4$
- (3) $3n + 4$
- (4) $3n - 4$

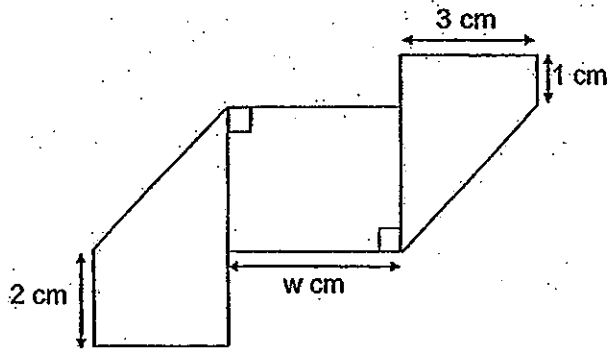
13. The table below shows the charges for delivering a parcel.

First 50 g	\$1.50
Every additional 20 g or part thereof	\$1.00

Jolin paid \$4.50 for the delivery of a parcel. Which one of the following is the possible mass of her parcel?

- (1) 150 g
- (2) 115 g
- (3) 95 g
- (4) 90 g

14. A rectangular piece of paper of perimeter 32 cm was folded once at the two ends to form the shape as shown below. Find the value of w .



- (1) 10
(2) 8
(3) 6
(4) 4
15. The average price of 3 key chains and 2 mugs is \$10.50.
The average price of the key chains is \$8.50.
Find the average price of the mugs.

- (1) \$9.00
(2) \$2.00
(3) \$12.50
(4) \$13.50



新加坡福建会馆属下五校小六统一考试
道南 • 爱同 • 崇福 • 南侨 • 光华

SINGAPORE HOKKIEN HUAY KUAN
5-SCHOOL COMBINED PRIMARY 6 PRELIMINARY EXAMINATIONS
TAO NAN • AI TONG • CHONGFU • NAN CHIAU • KONG HWA

2013
数学 MATHEMATICS
PAPER 1
BOOKLET B

Date : 23 August 2013

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

- ✓ Do not open this booklet until you are told to do so.
- ✓ Follow all instructions carefully.
- ✓ Answer all questions.
- ✓ You are not allowed to use a calculator

This booklet consists of 9 printed pages.

School : _____
Name : _____
Class : _____

TOTAL	20
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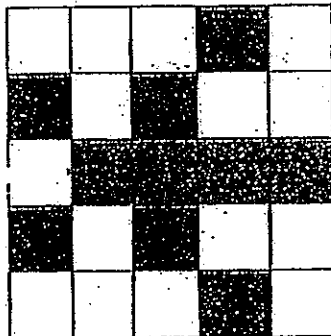
Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

16. Find the value of $7 \times (10 + 14) - 18 \div 9$.

Ans: _____

17. Draw a line of symmetry for the figure below.

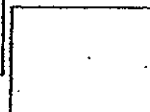
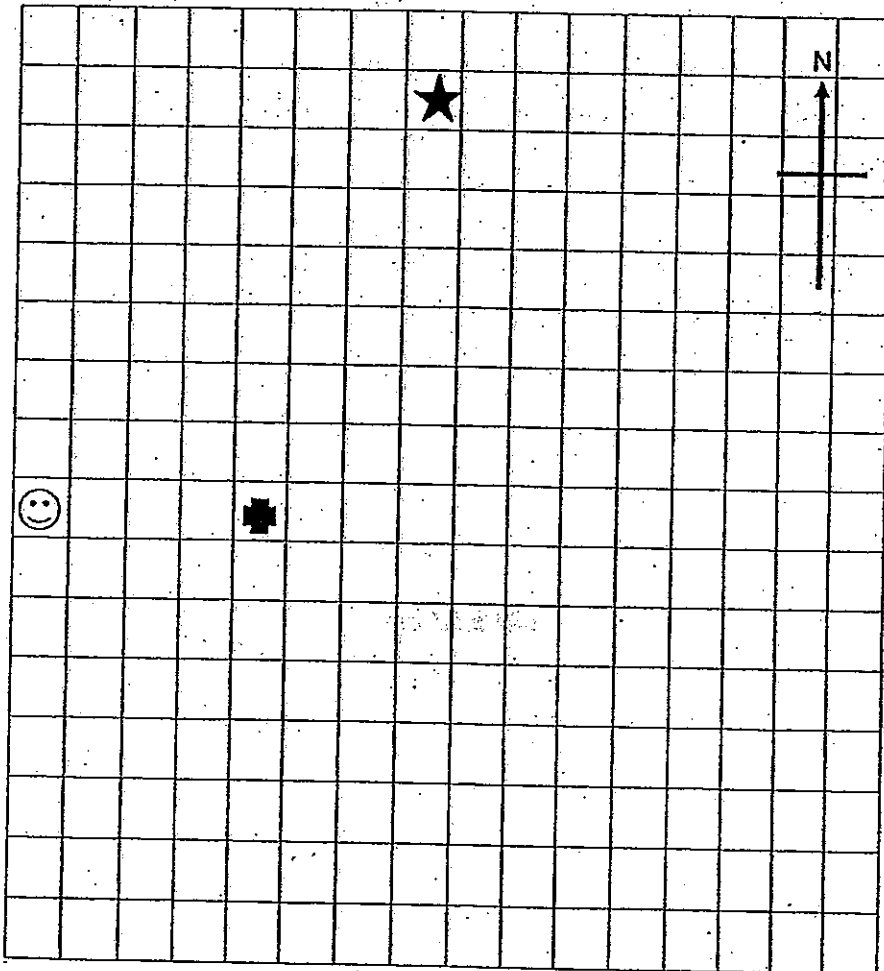


18. The following three sentences describe the location of point X.

- (i) ★ is exactly on the north-east of point X.
- (ii) ☺ is exactly on the South-west of point X
- (iii) ✚ is exactly on the South-east of point X.

Mark "X" on the grid map below to indicate the location of point X.

Do not write
in this space



19. Last year Malcolm was 14 years old and Mrs Tan was 42 years old.
How old will Malcolm be when Mrs Tan is n years old?

Do not write
in this space

Ans: _____

20. The table below shows the prices of apples and oranges sold at a supermarket.

Item	Price per item
Apple	m cents
Orange	$(m + 5)$ cents

Benjamin bought 6 fruits. He bought the same number of oranges and apples. How much did he spend?
(Give your answer in terms of m .)

Ans: _____ cents

21. Express 0.08 as a percentage.

Ans: _____%



22. 60% of Ryan's savings is equal to $\frac{3}{10}$ of Dean's savings.

Express Dean's savings as a ratio of Ryan's savings in its simplest form.

Ans: _____

23. Marcus bought a packet of potato chips for \$0.85 and a chocolate muffin for \$1.40. He gave the cashier a \$5 note. He received his change all in coins. What is the least number of coins Marcus would have received?

Ans: _____

Do not write
in this space

24. 5.06 litres of water is poured into some 2-l bottles. Each bottle is filled to the 2-litre mark except the last bottle. How much water is there in the last bottle?



2-l bottle

Ans: _____ ml

25. A construction company takes $\frac{3}{5}$ of a year to complete local projects that it has taken on. Given that each local project requires exactly $\frac{3}{10}$ of a year to complete, how many local projects has the company taken on?

Ans: _____

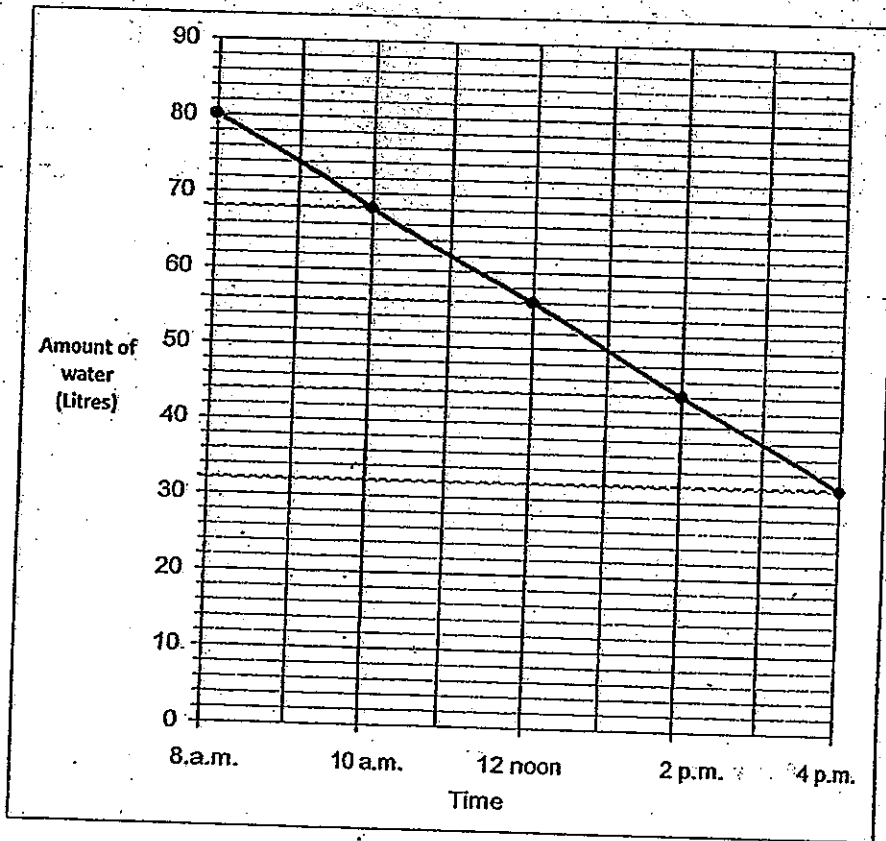
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in this space



Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answer in the units stated. (10 marks)

Do not write
in this space

26. Water was leaking from a tank in a water company. The line graph below shows the amount of water in the tank over a period of 8 hours.

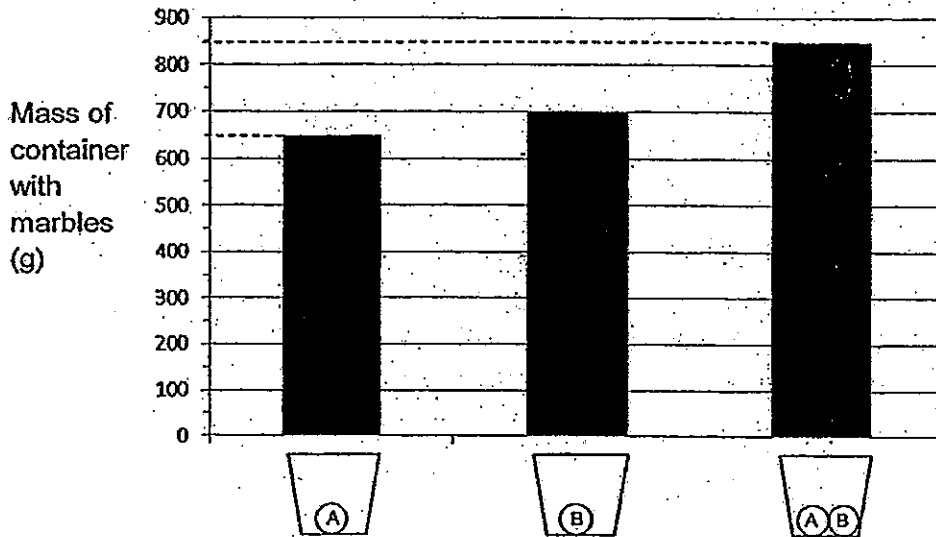


Given that the company had to pay a fine of \$12 for every 4 litres of water leaked, how much fine did the water company pay from 8 a.m. to 4 p.m.?

Ans: \$ _____



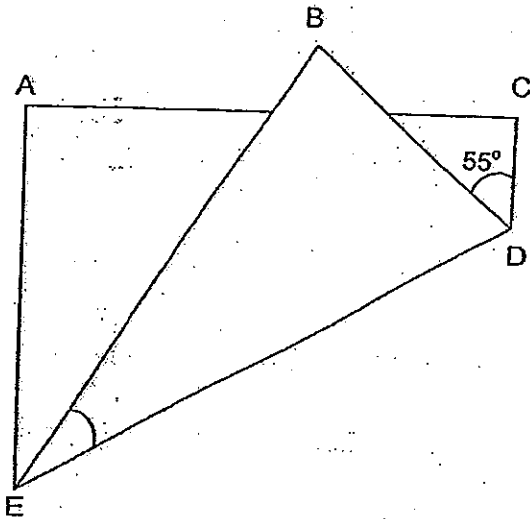
27. The graph below shows the mass of each identical container when different types of Marbles A and B are put in. Find the mass of one empty container.



Ans: _____ g

28. In the figure below, a rectangular piece of paper was folded as shown.
Find $\angle DEB$.

Do not write
in this space



Ans: _____ °

29. Amanda is given some money to buy some pens. She has used $\frac{4}{5}$ of her money to buy 8 pens. If she wants to buy 4 more pens, she will need another \$1.40. What is the cost of 1 pen?

Do not write
in this space

Ans: \$ _____

30. The ratio of the amount of water in Tank X to the amount of water in Tank Y was 1 : 4 at first. When 35 ℓ of water was transferred from Tank X to Tank Y, the new ratio became 1 : 9. How much water was in Tank Y at first?

Ans: _____ ℓ

End of Paper 1



新加坡福建会馆属下五校小六统一考试
道南 • 爱同 • 崇福 • 南侨 • 光华

SINGAPORE HOKKIEN HUAY KUAN
5-SCHOOL COMBINED PRIMARY 6 PRELIMINARY EXAMINATIONS
TAO NAN • AI TONG • CHONGFU • NAN CHIAU • KONG HWA

2013
数学 MATHEMATICS
PAPER 2

Date : 23 August 2013
Total Time for Paper 2: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

- Do not open this booklet until you are told to do so.
- ✓ Follow all instructions carefully.
 - ✓ Answer all questions.
 - ✓ Show your working clearly as marks are awarded for correct answers
 - ✓ You are allowed to use a calculator.

This booklet consists of 16 printed pages.

School : _____
Name : _____
Class : _____

Booklet A	
Booklet B	
Paper 2	
Total Marks	

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

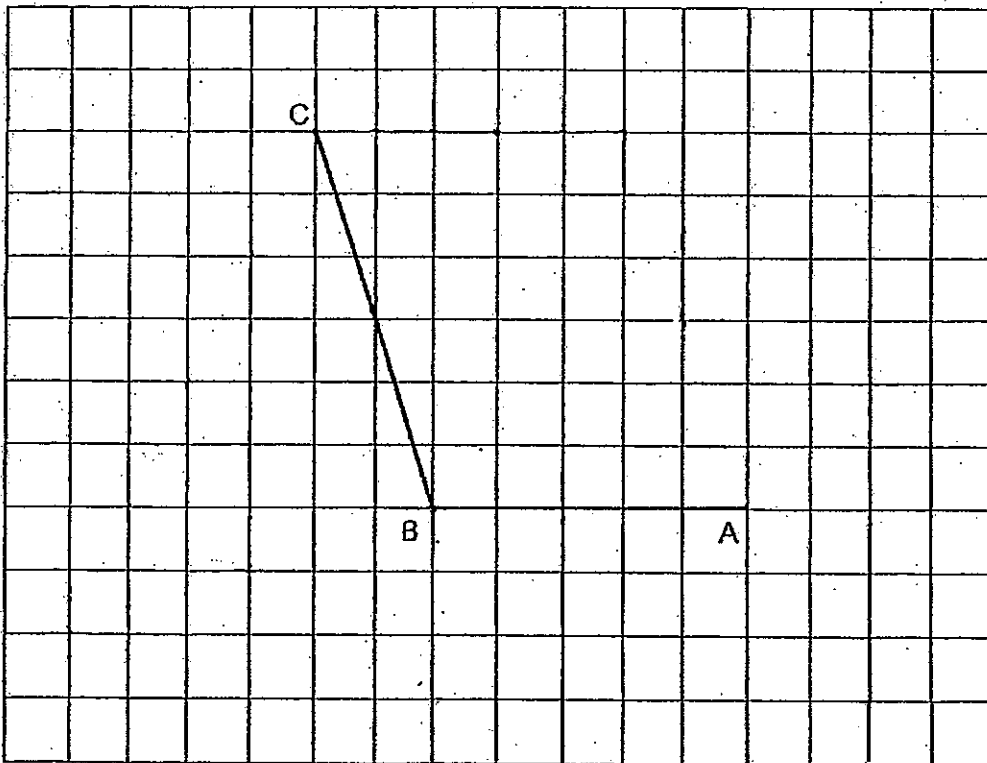
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(10 marks)

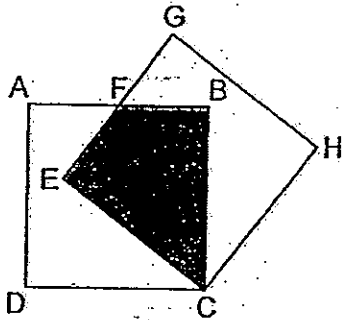
1. In the square grid below, two sides of a parallelogram ABCD have been drawn.

(a) Complete the drawing of the parallelogram ABCD.

(b) CB also forms one side of a triangle in which $\angle CBE$ is a right angle and $CB = BE$. Complete the drawing of the triangle CBE within the grid.



2. The figure below shows 2 identical squares. Lines AF, FB, EF and FG are of the same length. The shaded area is 50 cm^2 . Find the area of the unshaded parts.



Do not write
in this space

Ans: _____ cm^2

3. Some chairs were lined up in a row from one end to the other end of a field at an equal spacing of 1.3 m apart. When a few chairs were removed, the remaining 6 chairs had to line up from one end to the other end of the field at a new equal spacing of 2.6 m apart. How many chairs were removed?

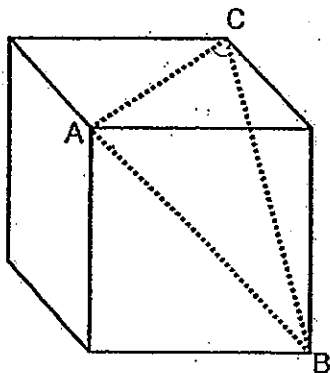
Ans: _____

4. Jordan has a rectangular board that measures 15 cm by 11 cm. He uses 35 identical square tiles to cover the board leaving an area of 25 cm^2 uncovered. Find the area of one square tile used.

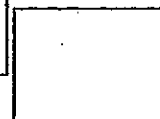
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in this space

Ans: _____ cm^2

5. The figure below shows a cube. Given that A , B and C are points at the corners of the cube, what is $\angle ABC$?



Ans: _____ $^\circ$



2013 Mathematics Primary 6 Preliminary Paper 2 – Errata

Name : _____

Date: 23 August 2013

Class : _____

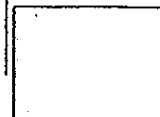
Do not write
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For questions 6 to 18, show your working clearly in the space below each question and write your answers in the spaces provided.

The number of marks available is shown in the brackets [] at the end of each question or part-question. (50 marks)

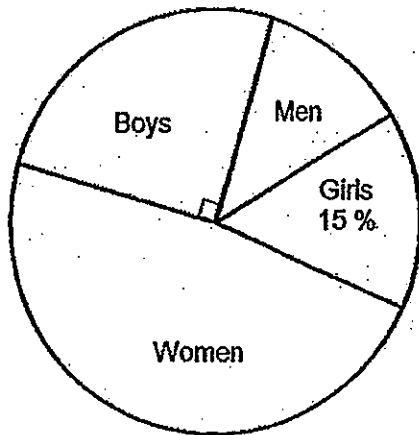
-
6. In a fruit stall, the number of apples was $\frac{4}{5}$ the number of pears. After some pears were sold, the number of pears decreased to 40% of the total number of fruits left. There was a total of 600 apples and pears left. How many pears were sold?

Ans : _____ [3]



7. The pie chart below shows the percentage of men, women, boys and girls at a funfair. There were 675 boys at the funfair. The number of men was $\frac{1}{4}$ the number of women. How many men were there at the funfair?

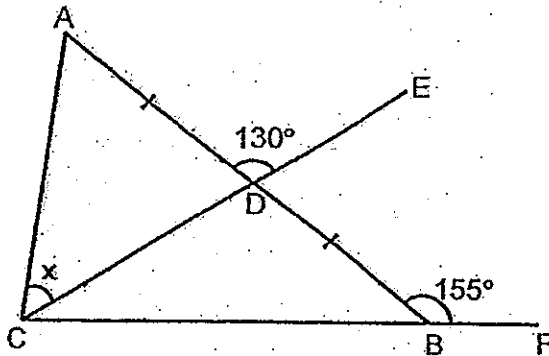
Do not write
in this space



Ans : _____ [3]

8. In the figure below, ABC is a triangle. CF and CE are straight lines. $AD = DB$, $\angle ADE = 130^\circ$ and $\angle ABF = 155^\circ$. Find $\angle x$.

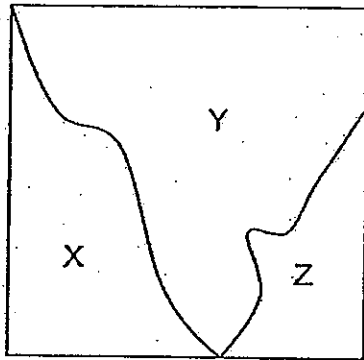
Do not write
in this space



Ans : _____ [3]

9. In the figure below, a square is cut into 3 parts X, Y and Z. The area of X is $\frac{1}{3}$ of the area of the whole square and the area of Y is $\frac{7}{4}$ of the area of Z. What is the ratio of the area of X to the area of Y to the area of Z?

Do not write
in this space



Ans : _____ [3]

10. After using $\frac{1}{3}$ of his potatoes, a food stall owner bought another 2 kg of potatoes. As a result, the stall owner now has $\frac{5}{6}$ as much potatoes as what he had at first. How many kilograms of potatoes were there at first?

Do not write
in this space

Ans : _____ [3]

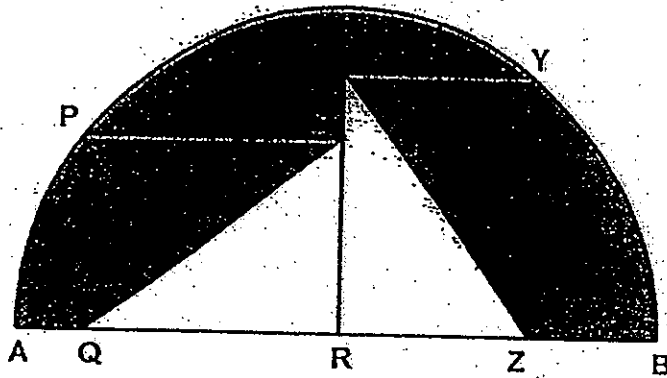
11. Mr Wang drove at a constant speed from Town A to Town B. At 9.20 a.m., he was 794 km from Town B and 206 km from Town A. At 12:50 p.m., he stopped at a petrol kiosk which was midway between Town A and Town B. At what speed did Mr Wang drive before he reached the petrol kiosk?

Do not write
in this space

Ans : _____ [4]

12. The figure below shows two identical rectangles within a semicircle of diameter 10 cm. R is the centre of the semicircle. Given that Rectangle PQRS and Rectangle XYZR has a perimeter of 14 cm each and line XS is 1 cm. Find the perimeter of the shaded part.
(Correct your answer to 2 decimal places)

Do not write
in this space



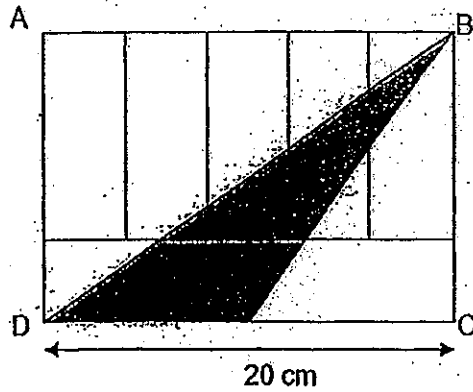
Ans : _____ [4]



13. In the figure below, rectangle ABCD is made up of 7 identical smaller rectangles.

Do not write
in this space

- (a) Find the perimeter of the rectangle ABCD.
- (b) Find the area of the shaded triangle.



Ans : (a) _____ [3]

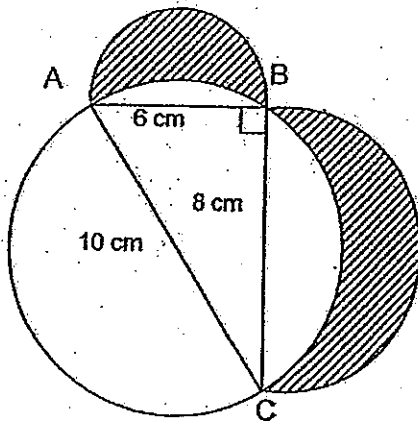
(b) _____ [1]



14. The figure below is made up of a right-angled triangle and a circle overlapping two semicircles. AC is the diameter of the circle. (Take $\pi = 3.14$)

Do not write
in this space

- (a) Find the perimeter of the shaded parts.
(b) Find the total area of the shaded parts.



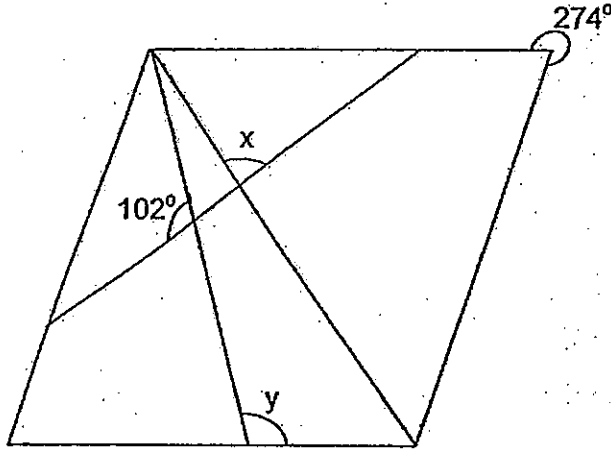
Ans : (a) _____ [2]

(b) _____ [3]

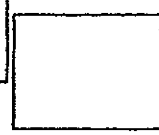


15. The figure below shows a rhombus divided into 6 parts with 3 straight lines. Find the sum of $\angle x$ and $\angle y$.

Do not write
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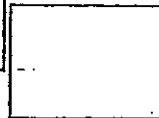
Ans : _____ [4]



16. Nigel had some 20¢ coins and 50¢ coins. He spent $\frac{1}{2}$ of his 20¢ coins and 75% of his 50¢ coins. The value of 20¢ coins left was the same as the value of 50¢ coins left. Given that the difference between the value of 20¢ coins and the value of 50¢ coins he had at first was \$40, how much did Nigel have at first?

Do not write
in this space

Ans : _____ [4]



17. In a shooting practice, Joel obtained the scores of 5, 7, 8 and 9 after shooting four times. The highest possible score for each shot was 10. After another three shots, Joel's average score became 8. Then, he had another three shots and his average score became 8.5. What were the possible scores for the last three shots?

Do not write
in this space

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Scores	5	7	8	9						

Ans : _____ [5]

18. Ali, Ben and Calvin collected stamps in the ratio 7 : 4 : 9. After Calvin gave $\frac{3}{10}$ of his stamps to Ali and Ben, Ali had 60 more stamps than Calvin and Ben's number of stamps increased by 35%.

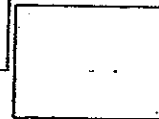
- (a) What was the ratio of Ali's stamps to Ben's stamps to Calvin's stamps in the end?
(b) How many stamps did Calvin have at first?

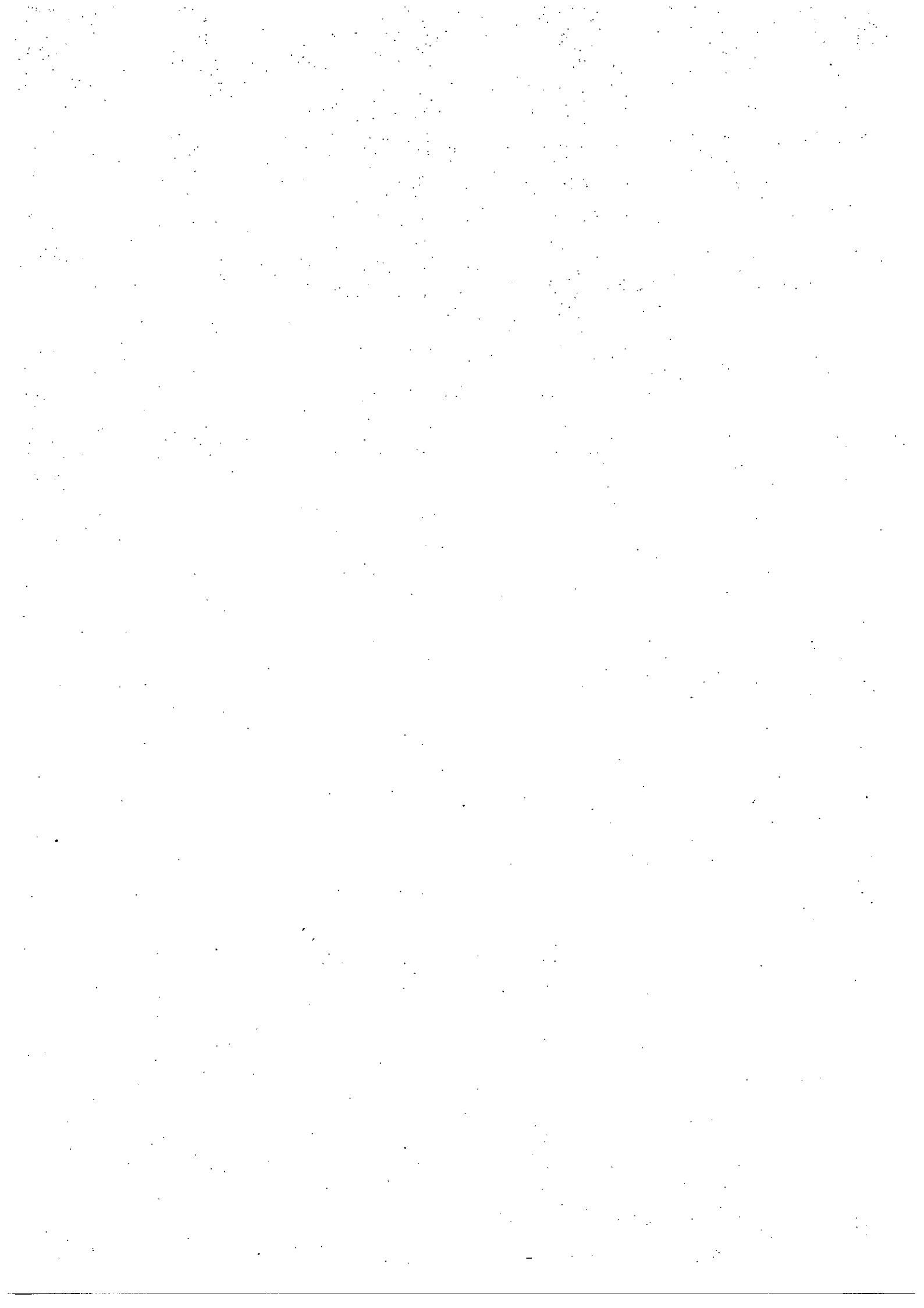
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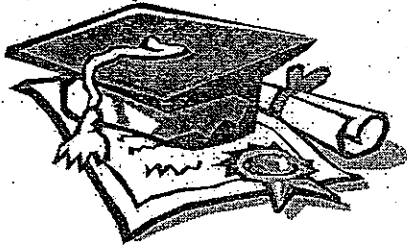
Ans : (a) _____ [3]

(b) _____ [2]

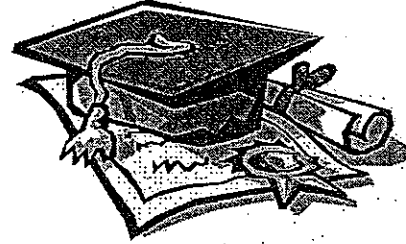
End of Paper 2







ANSWER SHEET



EXAM PAPER 2013

SCHOOL : HOKKIEN PRIMARY SCHOOL

LEVEL : PRIMARY 6

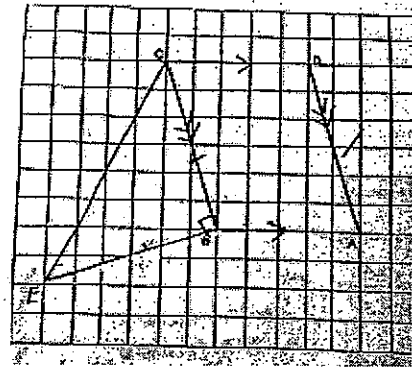
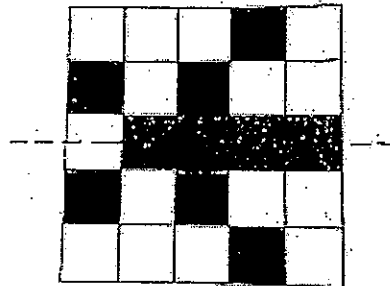
SUBJECT : MATHS

TERM : SA2

Booklet A

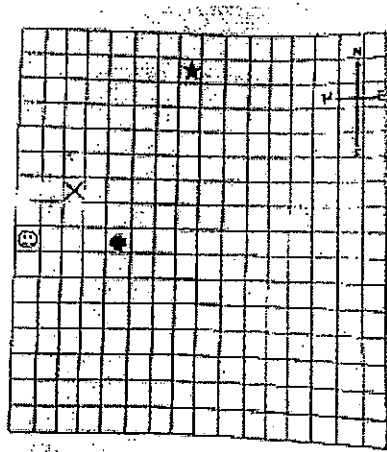
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
1	3	3	2	3	3	2	3	4	4	2	1	3	4	4	

- 16) 166
- 17)
- 18)
- 19) $n-28$ years old
- 20) $6m+15$ cents
- 21) 8%
- 22) 2:1
- 23) 5 coins
- 24) 1060 ml
- 25) 2
- 26) \$144
- 27) 500g
- 28) 27.5°
- 29) \$ 0.70
- 30) 280 l



Paper 2#

- 1)
- 2) $50 \times 2 = 100\text{cm}^2$
- 3) $6-1 = 5$
 $2.6 \times 5 = 13$
 $13 \div 1.3 = 10$
 $10+1 = 11$
 $11-6 = 5$
- 4) $15 \times 11 = 165$
 $165-25 = 140$
 $140 \div 35 = 4$



- 5) $AC=AB=BC$
 Triangle ABC is an Equilateral Triangle,
 $\angle ABC = 60^\circ$

6) $100\% \rightarrow 600$
 $40\% \rightarrow 240$
 $60\% \rightarrow 360$
 $360 \div 4 = 90$
 $90 \times 5 = 450$
 $450 - 240 = 210$

7) $25\% \rightarrow 675$
 $100\% \rightarrow 2700$
 $100\% - 25\% - 10\% = 60\%$
 $60\% \rightarrow 1620$
 $1620 \div 5 = 324$

8) $180 - 130 = 50$
 $180 - 155 = 25$
 $180 - 130 - 25 = 25$
 $(180 - 50) \div 2 = 65^\circ$

9) $7 + 4 = 11$
 $11 \div 2 = 5.5$
 $X : Y : Z$
 $5.5 : 7 : 4$
 $11 : 14 : 8$

10) $6u - 2u = 4u$
 $5u - 4u = 1u$
 $1u \rightarrow 2kg$
 $6u \rightarrow 12kg$

11) $794 + 206 = 1000$
 $1000 \div 2 = 500$
 $794 - 500 = 294$
 $9.20am \text{ to } 12.50pm = 3h30mins$
 $3 \times 2 = 6$
 $6 + 1 = 7$
 $294 \div 8 = 42$
 $42 \times 2 = 84km/h$

12) $14 - 1 - 1 = 12$
 $12 \div 4 = 3$
 $3 + 1 = 4$
 $10 - 4 - 3 = 3$

$\frac{1}{2} \times \pi \times 10 = 15.71$

$5 \times 2 = 10$
 $15.71 + 10 + 3 + 1 = 29.71cm$

13) a) $20 \div 5 = 4$
 $20 \div 2 = 10$
 $10 + 4 = 14$
 $20 + 20 + 14 + 14 = 68$

b)

$$\frac{1}{2} \times 14 \times 10 = 70$$

14) a)

$$\frac{1}{2} \times 3.14 \times 10 = 15.7$$

$$\frac{1}{2} \times 3.14 \times 6 = 9.42$$

$$\frac{1}{2} \times 3.14 \times 8 = 12.56$$

$$15.7 + 9.42 + 12.56 = 37.68$$

b)

$$\frac{1}{2} \times 6 \times 8 = 24$$

$$\frac{1}{2} \times 3.14 \times 3 \times 3 + \frac{1}{2} \times 3.14 \times 4 \times 4 = 39.25$$

$$\frac{1}{2} \times 3.14 \times 5 \times 5 = 39.25$$

$$39.25 + 24 - 39.25 = 24$$

$$15) 360 - 274 = 86$$

$$(360 - 86 - 86) \div 2 = 94$$

$$(360 - 102 - 102) \div 2 = 78$$

$$(180 - 86) \div 2 = 47$$

$$360 - 102 - 47 = 211^\circ$$

16)

$$25\%B - 50\%A = 0$$

$$100\%B - 100\%A = 40$$

$$100\%B - 200\%A = 0$$

$$100\%A = 40$$

$$100\%B = 80$$

$$40 + 80 = 120$$

$$17) 8 \times 7 = 56$$

$$56 - 5 - 7 - 8 - 9 = 27$$

$$27 \div 3 = 9$$

$$8.5 \times 10 = 85$$

$$85 - 5 - 7 - 8 - 9 - 27 = 29$$

$$(10, 10, 9)$$

18)

$$A:B:C$$

$$7:4:9$$

$$70:40:90$$

$$3 \times 9 = 27u$$

$$100\% \rightarrow 40u$$

$$B \ 135\% \rightarrow 54u$$

$$54 - 40 = 14u$$

$$27u - 14u = 13u$$

$$A = 70 + 13 = 83u$$

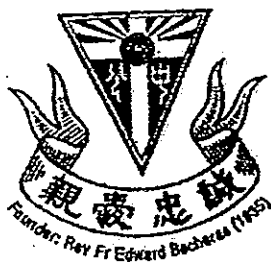
$$C = 90 - 27 = 63u$$

A:B:C

83: 54:63

$$b) 20u \rightarrow 60$$

$$90u \rightarrow 270$$



CATHOLIC HIGH SCHOOL
PRELIMINARY EXAMINATION 1 2013
MATHEMATICS
PRIMARY 6
PAPER 1
(BOOKLET A)

Name: _____ ()

Class: P 6 _____

Date: 20 May 2013

15 questions

20 marks

Total Time for Booklets A and B: 50 min

Booklet A : Page 1 to 6

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Shade your answers in the Optical Answer Sheet (OAS) provided.

You are not allowed to use a calculator.

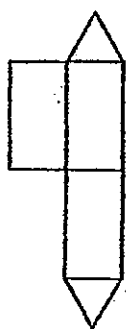
Answer all questions.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet. All diagrams are not drawn to scale. (20 marks)

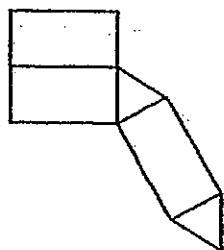
1. Which of the following is the best estimate for 337×74 ?

- (1) 330×70
 - (2) 330×80
 - (3) 340×70
 - (4) 340×80
-

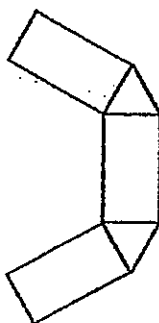
2. Which of the following figures is a net of a prism?



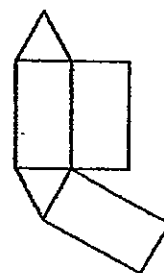
A



B



C



D

- (1) A
 - (2) B
 - (3) C
 - (4) D
-

(Go on to the next page)

3. Which of the following is nearest to 1?

(1) $\frac{1}{2}$

(2) $\frac{2}{5}$

(3) $1\frac{2}{3}$

(4) $1\frac{3}{4}$

4. Round off 75 485 to the nearest hundred.

(1) 75 000

(2) 75 490

(3) 75 500

(4) 80 000

5. The amount of time Jeremy takes to sing the National Anthem of Singapore at the flag-raising ceremony every morning is approximately _____.

(1) 1.5 s

(2) 1.5 min

(3) 15 s

(4) 15 min

6. Find the sum of 3 hundreds, 8 tenths and 7 thousandths.

(1) 380.007

(2) 300.780

(3) 300.807

(4) 300.087

(Go on to the next page)

7. Express 2.5% as a fraction.

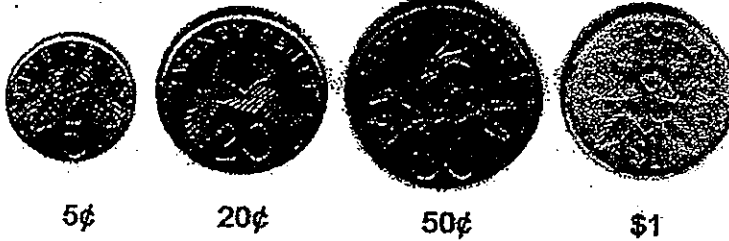
(1) $\frac{1}{4}$

(2) $\frac{1}{40}$

(3) $\frac{2}{5}$

(4) $2\frac{1}{2}$

8. Ethan had the following coins in his wallet.



He used some coins to pay for sweets at a candy shop. He used two coins without receiving any change. Which of the following amount could not be the payment amount?

(1) 25¢

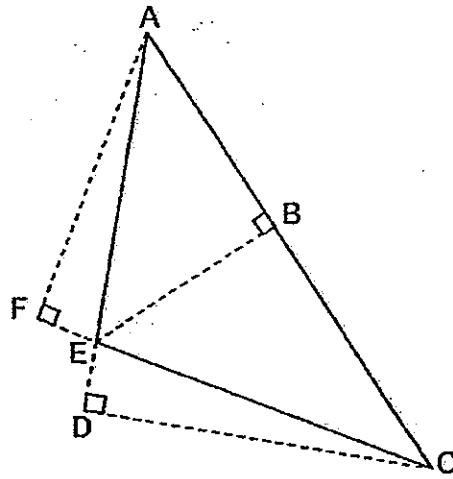
(2) 70¢

(3) \$1.05

(4) \$1.25

(Go on to the next page)

9. ACE is a triangle. Which one of the following gives the area of ACE?



- (1) $\frac{1}{2} \times AD \times DC$
(2) $\frac{1}{2} \times EC \times AF$
(3) $\frac{1}{2} \times AC \times AF$
(4) $\frac{1}{2} \times EC \times EB$
-

10. The ratio of the number of pens Benjamin has to the number of pens Jeremy has is 1 : 4.
What percentage of the total number of pens does Jeremy have?

- (1) 20%
(2) 25%
(3) 80%
(4) 125%
-

(Go on to the next page)

11. Gabriel had a 3 m string. He used $2\frac{3}{4}$ m to tie a carton box and cut the remaining string equally into 5 shorter pieces.
What is the length of each of the shorter piece of string?

(1) $\frac{4}{5}$ m

(2) $\frac{1}{20}$ m

(3) $1\frac{1}{4}$ m

(4) 20 m

12. Jane and Sally were queuing in a line. Jane was in the middle of the line and Sally was the 8th in the line. There were 41 pupils altogether.
How many pupils were there between Jane and Sally?

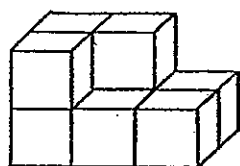
(1) 11

(2) 12

(3) 13

(4) 14

13. The solid below is made up of identical unit cubes.



What is the least number of unit cubes that could be added to the solid to form the next bigger cube?

(1) 3

(2) 9

(3) 18

(4) 27

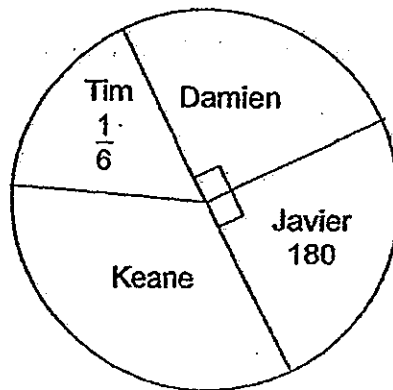
(Go on to the next page)

14. The table shows the parking charges at a car park.

Vehicle parking charges	
7.00 a.m to 5.30 p.m.	\$1.20 per hour or part thereof
After 5.30 p.m	\$3.00 per entry

How much would Mrs Wong have to pay if she parked her car from 4.15 p.m. to 7 p.m. on the same day?

- (1) \$4.50
(2) \$5.40
(3) \$9.00
(4) \$9.90
-
15. The pie chart represents the number of game cards Tim, Damien, Javier and Keane each had in their collection.



Javier had 180 game cards while Tim had $\frac{1}{6}$ of the total number of game cards. How many game cards did Keane have?

- (1) 240
(2) 300
(3) 330
(4) 600

END OF BOOKLET A

(Go on to the next page)



CATHOLIC HIGH SCHOOL

PRELIMINARY EXAMINATION 1 2013

MATHEMATICS

PRIMARY 6

PAPER 1

(BOOKLET B)

Name: _____ ()

Class: P 6 _____

Date: 20 May 2013

15 questions

20 marks

Total Time for Booklets A and B: 50 min

Booklet B : Page 7 to 13

Booklet A	
Booklet B	
Total	

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are **not** allowed to use a calculator.

Answer all questions.

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space.

16. Write three hundred and fifty thousand and sixty-eight in figures.

Ans: _____

17. Find the value of $36 - 24 \div 12 + (9 + 8) \times 4$.

Ans: _____

18. Find the value of $38.52 \div 60$.

Ans: _____

(Go on to the next page)

19. Write down all the common factors of 18 and 24.

Do not write
in this space.

Ans: _____

20. $\frac{3}{5}$ kg of beads was packed into bags of $\frac{3}{10}$ kg each.
How many bags of beads were there?

Ans: _____

21. Find the value of $7m - 47 - \frac{5m}{6}$ when $m = 8$.
Give your answer as a mixed number in the simplest form.

Ans: _____

(Go on to the next page)

22. The ratio of the number of Royce's marbles to Jaren's marbles is 3 : 7. How many marbles must Jaren give to Royce so that each of them has 45 marbles?

Do not write
in this space.

Ans: _____

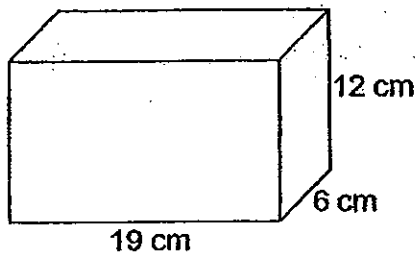
23. John and his friends visited a theme park. They left the theme park at 17 30. At what time did they enter the theme park if they had spent 7 h 20 min there?
Express your answer in 24-hour clock.

Ans: _____

(Go on to the next page)

24. What is the maximum number of 3-cm cubes that can be cut from a wooden cuboid measuring 19 cm by 6 cm by 12 cm?

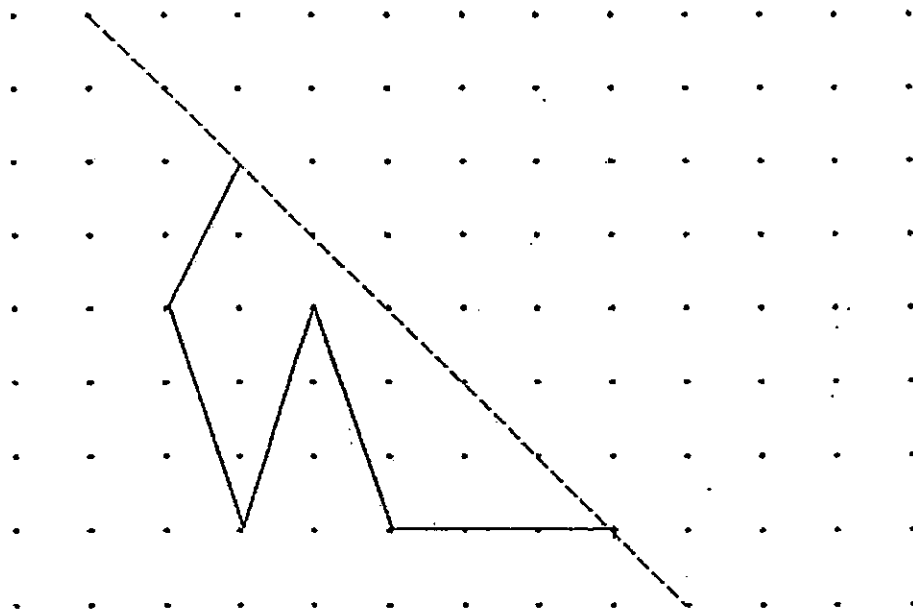
Do not write in this space.



Ans: _____



25. The diagram below shows half of a symmetric figure with the dotted line as its line of symmetry. Draw the other half of the symmetric figure to complete the symmetric figure.



Total marks for questions 16 to 25
(Go on to the next page)

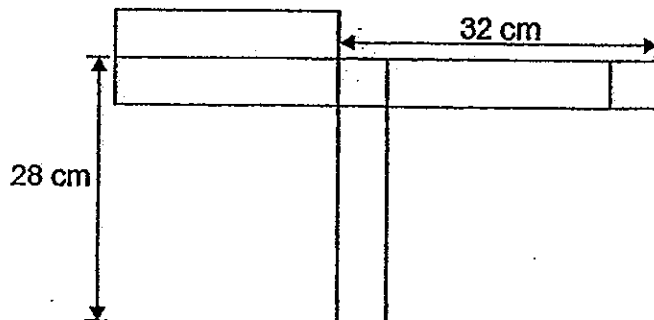
Questions 26 to 30 carry 2 marks each. Show your working and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space.

26. Express $\frac{6}{7}$ as a decimal and correct the answer to 2 decimal places.

Ans: _____

27. The figure below shows the net of a cuboid with a square base. Find the volume of the cuboid.



Ans: _____ cm³

(Go on to the next page)

28. Mr Lee paid \$288 for 2 pairs of shoes at a shoe shop during a sale. What was the usual price of the pair of shoes?

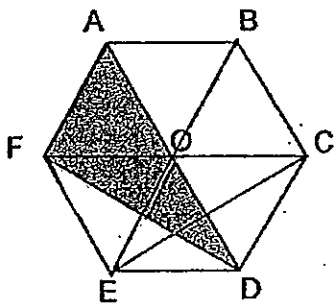
Do not write in this space.

SALE!
Buy a pair of shoes and
get another pair of
shoes at 40% discount.

Ans: \$ _____



29. In the diagram below, $ABCO$ and $FODE$ are identical rhombuses and AOF and OCD are identical equilateral triangles. What fraction of the figure $ABCDEF$ is shaded?

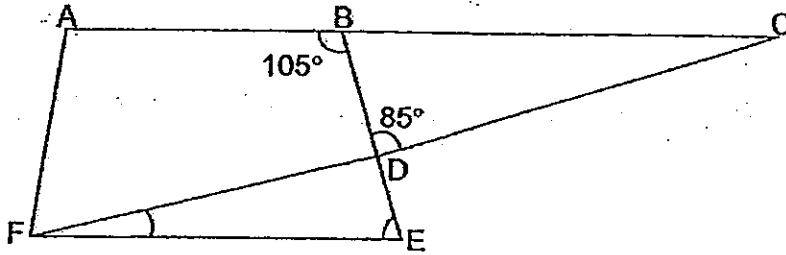


Ans: _____



(Go on to the next page)

30. In the figure below, ABEF is a trapezium and BCD is a triangle. ABC is a straight line. $\angle FDE = \angle CDE$. Find $\angle DFE$.



Ans: _____°

Total marks for questions 26 to 30

END OF BOOKLET B
END OF PAPER 1

(Go on to the next page)



CATHOLIC HIGH SCHOOL

PRELIMINARY EXAMINATION 1 2013

MATHEMATICS

PRIMARY 6

PAPER 2

Name : _____ ()

Class : P 6 _____

Date: 20 May 2013

Total Time: 1 h 40 min

Parent's Signature:

Paper 1 Booklet A	20
Paper 1 Booklet B	20
Paper 2	60
Total Marks	100

There are 16 pages in this booklet.

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are allowed to use a calculator.

Answer all questions.

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. (10 marks)

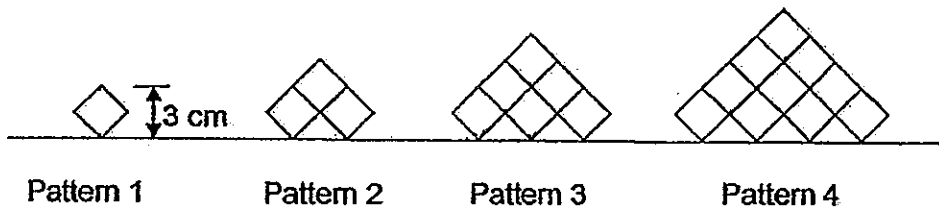
Do not write in this space.

1. Mitchell had $58k$ number of sweets. He gave $34k$ number of sweets to his younger brother and packed the remaining sweets equally into 6 plastic bags. How many sweets were there in each plastic bag? Give your answer in terms of k in the simplest form.

Ans: _____



2. Fablan used identical square tiles to form a sequence of patterns. The first four patterns are shown below.



The vertical height of Pattern 1 is 3 cm.
What is the vertical height of Pattern 50?

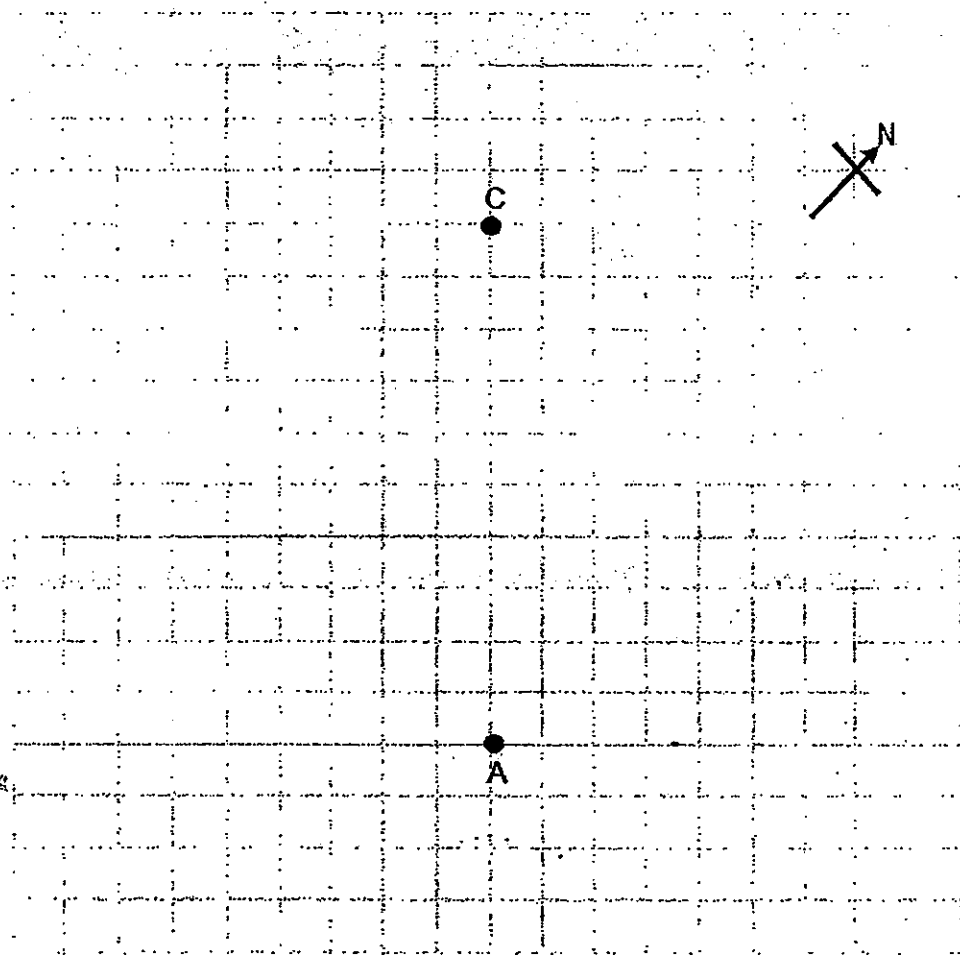
Ans: _____ cm



(Go on to the next page)

3. A, B C and D are four points on a square grid below. ABCD is a square such that D is north of A and B is west of A. Draw and label the square ABCD in the square grid below.

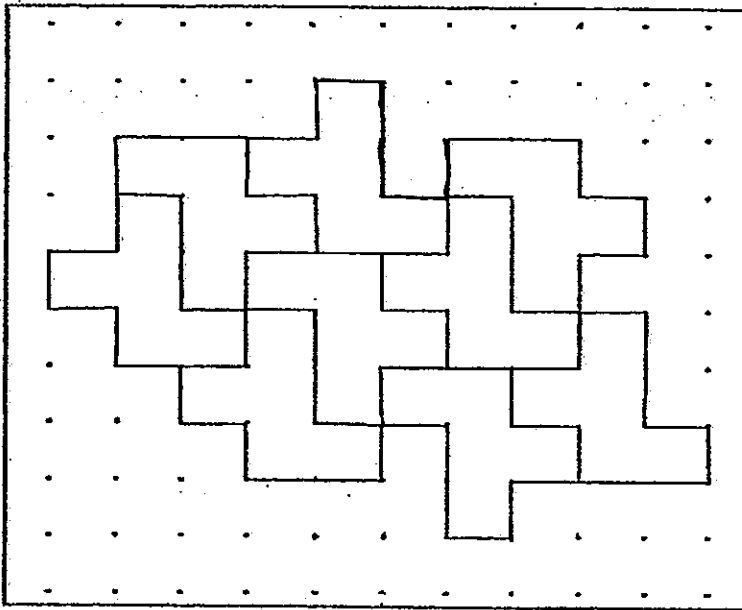
Do not write in this space.



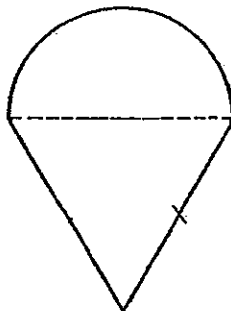
(Go on to the next page)

4. The pattern in the box shows part of a tessellation. Extend the tessellation by drawing three more unit shapes in the space provided in the box.

Do not write in this space.



5. The figure is made up of a semicircle and an equilateral triangle. The diameter of the semicircle is 10 cm. What is the perimeter of the figure? Leave your answer in terms of π .



Ans: _____ cm



(Go on to the next page)

For questions 6 to 18, show your working and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. All diagrams are not drawn to scale. (50 marks)

Do not write
in this space.

6. 4 children share some stamps. The average number of stamps Abel and Betty has is 158. The average number of stamps Don and John has is 140. What is the average number of stamps each child has?

Ans: _____ [3]

(Go on to the next page)

7. $\frac{1}{3}$ of Walter's savings is $\frac{3}{5}$ of Bryan's savings. Their difference in savings is \$288. How much is their total savings?

Do not write
in this space.

Ans: _____ [3]



(Go on to the next page)

8. Michelle spends 35% of her salary every month. Her salary for June was 20% more than that of May. As a result, her expenditure in June increased by \$175. How much was Michelle's expenditure in May?

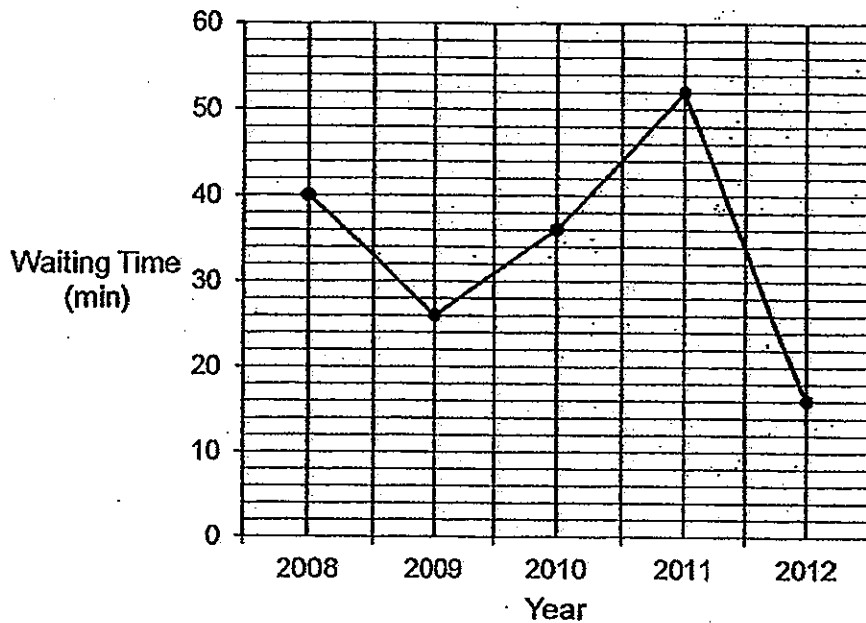
Do not write
in this space.

Ans: _____ [3]

(Go on to the next page)

9. The line graph below shows the average waiting time from 2008 to 2012 for the patients at the emergency department of a hospital.

Do not write in this space.



- (a) What was the difference between the longest waiting time and the shortest waiting time during the period from 2008 to 2012?
- (b) Find the percentage increase in waiting time for a patient between 2009 and 2010.
(Give your answer correct to 1 decimal place)

Ans: (a) _____ [1]

(b) _____ [2]



(Go on to the next page)

10. Mr-Chua and Mr Huang had \$750 and \$520 respectively. After each of them bought the same video camera, they were left with money in the ratio of 7 : 2. What was the cost of the video camera?

Do not write
in this space.

Ans: _____ [3]

(Go on to the next page)

11. A square piece of paper, ABCD, is shaded on one side as shown in Figure 1. It is then folded at its corner B to form an isosceles triangle as shown in Figure 2. The perimeter and area of the remaining shaded region in Figure 2 is 72 cm and 180 cm^2 respectively. Find the area of the isosceles triangle.

Do not write
in this space.

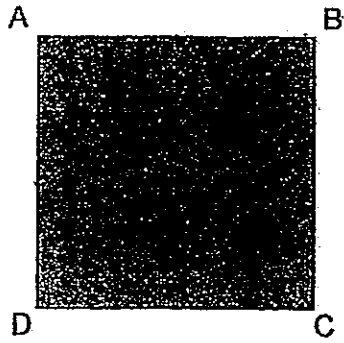


Figure 1

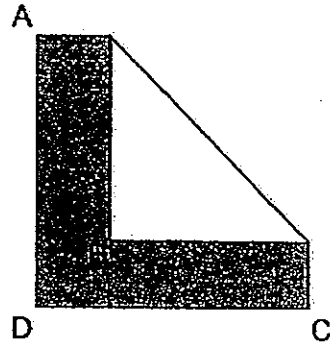
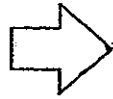


Figure 2

Ans: _____ [4]



(Go on to the next page)

12. In a telematch, Ryan and Bala competed with each other to get from the starting line to the finishing line by playing the Scissors-Paper-Stone game. Each win of the game allows the winner to move forward by 3 steps. The loser moves backward by 1 step. Ryan played 50 times of the game with Bala and crossed the finishing line first. There were 94 steps between the starting line and the finishing line. How many times did Ryan win the game?

Do not write
in this space.

Ans: _____ [4]



(Go on to the next page)

13. Max paid \$7.70 for 6 erasers and 4 pens. With the same amount of money, he could buy 14 erasers. If he had decided to buy pens only, how many pens could he buy with \$19.80?

Do not write in this space.

Ans: _____ [4]

(Go on to the next page)

14. Mrs Tay baked some chocolate and vanilla cakes. $\frac{3}{5}$ of the cakes were chocolate and the rest were vanilla. She gave away $\frac{1}{3}$ of the total number of cakes. An equal number of chocolate and vanilla cakes were given away and 14 vanilla cakes were left. How many chocolate cakes were left?

Do not write
in this space.

Ans: _____ [4]

(Go on to the next page)

15. Charlotte, Judith and Maple shared some stickers. The ratio of the total number of stickers received by Judith and Maple to the number of stickers received by Charlotte was 3 : 4. When Charlotte gave 20 stickers to Judith and 15 stickers to Maple, and Judith gave 10 stickers to Maple, each of them had the same number of stickers. Find the total number of stickers Judith had at first.

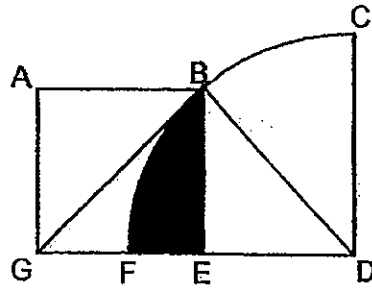
Do not write
in this space.

Ans: _____ [4]

(Go on to the next page)

16. The figure is made up of a quarter circle CDF and a square ABEG. The corner B of the square lies on the circumference of the quarter circle. GFED is a straight line. $GB = FD = 10$ cm. Find the area of the shaded part BEF. (Take $\pi = 3.14$)

Do not write in this space.



Ans: _____ [5]



(Go on to the next page)

17. On a table top was a deck of coloured cards such that for every two blue cards, there were three red cards. The cards were arranged in the order as shown in Figure 1. James and his friends, Nicholas, Sally and Fabian, sat round the table as shown in Figure 2. Starting with James, each person took turns to draw a card from the top of the deck of cards in a clock-wise direction. They continued to draw until there were no cards left on the table.

Do not write in this space.

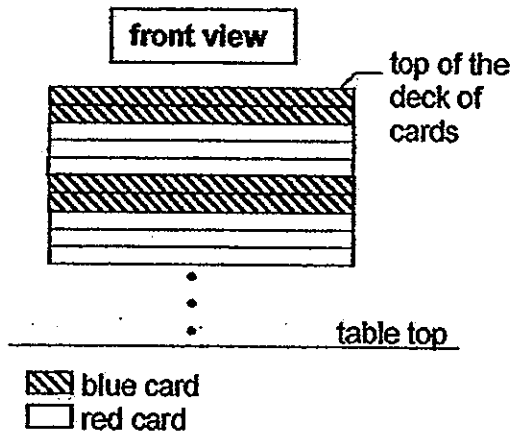


Figure 1

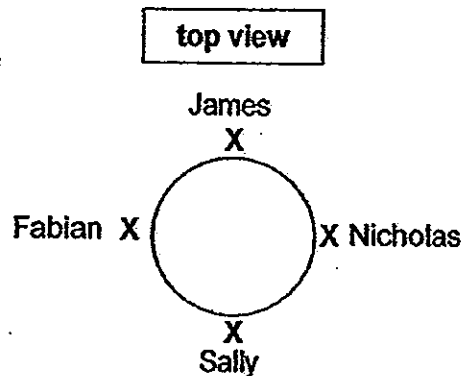


Figure 2

- (a) How many cards did each person have in their hands when they had an identical set of cards each for the first time?
- (b) When all cards were drawn from the table, they counted that there were 36 more red cards than blue cards. How many cards were there in the deck of cards at first?

Ans: (a) _____ [2]

(b) _____ [3]

(Go on to the next page)

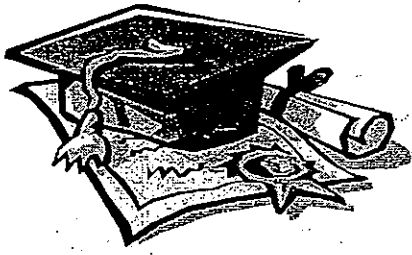
18. There were some boys and girls in the school hall at first. 40% of the boys and 10% of the girls left the school hall. As a result, $\frac{3}{4}$ of the pupils remained in the school hall. There were 12 more girls than boys who remained in the school hall. How many boys were there at first?

Do not write
in this space.

Ans: _____ [5]



**END OF PAPER.
PLEASE CHECK YOUR WORK CAREFULLY.**



ANSWER SHEET

EXAM PAPER 2013

SCHOOL : CATHOLIC HIGH

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
3	2	1	3	2	3	2	4	2	3	2	2	3	2	1

16) 350068

17) 102

18) (0.642)

19) 1,2,3,6

20) 2

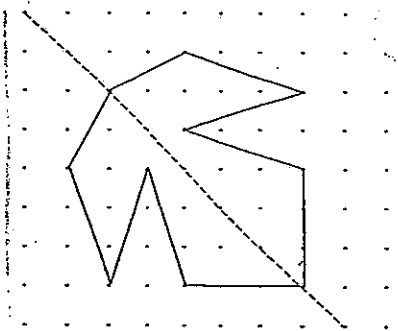
21) $2\frac{1}{3}$

22) 18

23) 1010

24) 48

25)



26) 0.86

27) 384 cm³

28) \$180

29) $\frac{1}{3}$

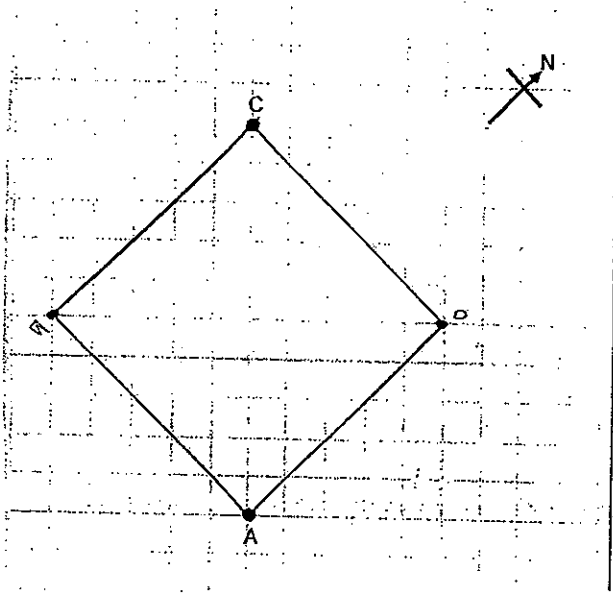
30) 100°

Paper 2

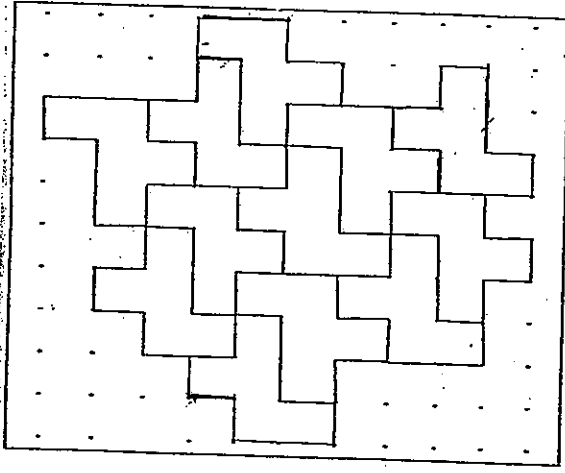
1) $58k - 34k = 24k$
 $24k \div 6 = 24k/6$
 $= 4k$

2) $50 \div 2 = 25$
 $25 \times 3 = 75$
 $75 + 1.5 = 76.5\text{cm}$

3)



4)



5) per of \square $\rightarrow \frac{1}{2} \times \pi \times 15 = 5\pi$ cm
 Triangle $\rightarrow 10 \times 2 = 20$ cm
 Total $\rightarrow 5\pi$ cm + 20cm
 $= (5\pi + 20)$ cm

6) $A + B = 158 \times 2 = 316$
 $D + J = 140 \times 2 = 280$
 Total $= 316 + 280 = 596$
 Average $= 596 \div 4 = 149$

7) $4u \rightarrow \$288$
 $1u \rightarrow \$288 \div 4 = \72
 $14u \rightarrow 72 \times 14 = \1008

8) $M \rightarrow 100\%$ $J \rightarrow 120\%$
 Spent during M $\rightarrow 100\% \times 35\% = 35\%$
 Spent during J $\rightarrow 120\% \times 35\% = 42\%$
 Diff $\rightarrow 42\% - 35\% = 7\%$
 $7\% \rightarrow \$175$
 $1\% \rightarrow \$25$
 $35\% \rightarrow \$25 \times 35 = \875

9) a) Longest $\rightarrow 2011 = 52$ min
 Shortest $\rightarrow 2012 = 16$ min
 Diff $\rightarrow 52 - 16 = 36$ min
 b) Diff $\rightarrow 16 \div 0.26 \times 1\% \approx 38.5\%$

10) $5u \rightarrow 750 - 520 = 230$
 $1u \rightarrow 230 \div 5 = 46$
 $2u \rightarrow 92$
 Video camera $\rightarrow 520 - 92 = \$428$

11) A. of ABCD $\rightarrow 18 \times 18 = 324$ cm²
 A. of BEFG $\rightarrow 324 - 180 = 144$ cm²
 A. of \triangle $\rightarrow 144 \div 2 = 72$ cm²

12) win	lose	Total
$25 \times 3 = 75$	$25 \times 1 = 25$	$75 - 25 = 50$ X
$30 \times 3 = 90$	$20 \times 1 = 20$	$90 - 20 = 70$ X
$40 \times 3 = 120$	$10 \times 1 = 10$	$120 - 10 = 110$ X
$35 \times 3 = 105$	$15 \times 1 = 15$	$105 - 15 = 90$ X
$37 \times 3 = 111$	$13 \times 1 = 13$	$111 - 13 = 98$ X
$36 \times 3 = 108$	$14 \times 1 = 14$	$108 - 14 = 94$ ✓

$$13) 6e + 4p = \$7.70$$

$$14e = \$7.70$$

$$14e - 6e = 8e$$

$$8e = 4p \quad 2e = 1p$$

$$1e = \$7.70 \div 14 = \$0.55$$

$$1p = \$0.55 \times 2 = \$1.10$$

$$\$19.80 \div \$1.10 = 18 \text{ pens}$$

$$14) 7u \rightarrow 14$$

$$1u \rightarrow 14 \div 7 = 2$$

$$13u \rightarrow 2 \times 13 = 26 \text{ cakes left}$$

$$15) J+M : C : T$$

$$3 : 4 : 7$$

$$9 : 12 : 21$$

$$J+M : J : M : C : T$$

$$14 : 7 : 7 : 7 : 2$$

$$\text{Diff} \rightarrow 120 - 70 = 50$$

$$50 \rightarrow 20 + 15 = 35$$

$$10 \rightarrow 35 \div 5 = 7$$

$$\text{Aft} + J \rightarrow 7 \times 7 = 49$$

$$\text{Bef} J \rightarrow 49 + 10 - 20 = 39$$

$$16) \text{area of ABGE} \rightarrow (\frac{1}{2} \times 10 \times 5) \times 2 = 50 \text{cm}^2$$

$$\text{area of } \square \rightarrow \frac{1}{4} \times 3.14 \times 10 \times 10 = 78.5 \text{cm}^2$$

$$\text{area of big } \triangle \rightarrow \frac{1}{2} \times 20 \times 10 = 100 \text{cm}^2$$

$$a + b \rightarrow 100 \text{cm}^2 - 78.5 \text{cm}^2 = 21.5 \text{cm}^2$$

$$b \rightarrow 10.75 \text{cm}^2$$

$$\text{area of GBE} \rightarrow \frac{1}{2} \times 10 \times 5 = 25 \text{cm}^2$$

$$\text{shaded area} \rightarrow 25 \text{cm}^2 - 10.75 \text{cm}^2 = 14.25 \text{cm}^2$$

$$17) a) 5$$

$$b) 180$$

check

$$2 + 3 = 5$$

$$3 - 2 = 1$$

$$36 \div 1 = 36$$

$$36 \times 5 = 180$$

$$18) 20\% g \rightarrow 20\% g$$

$$30\% g/b \rightarrow 12$$

$$1\% g/b \rightarrow 12/30$$

$$100\% b \rightarrow 12/30 \times 100 = 40$$

Name : _____ ()

Class : Primary 6 _____



Primary 6 Mathematics

2013 Preliminary Examination

Paper 1

Booklet A

20 August 2013

TOTAL TIME FOR BOOKLETS A AND B: 50 MINUTES

INSTRUCTIONS TO CANDIDATES

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

SHADE YOUR ANSWERS IN THE OPTICAL ANSWER SHEET (OAS)
PROVIDED.

THE USE OF CALCULATORS IS NOT ALLOWED.

This booklet consists of 8 printed pages including the cover page.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). (20 marks)

- 1) A charitable organisation raised \$624 728 last year. Express this amount to the nearest hundred dollars.

- (1) \$624 000 (2) \$624 700
(3) \$624 800 (4) \$625 000

- 2) Evaluate $121 - (38 - 2) + 9 - 6$.

- (1) 111 (2) 109
(3) 66 (4) 27

- 3) $250 \div 200 =$ _____.

- (1) 125.0 (2) 12.5
(3) 1.25 (4) 0.125

- 4) Jonah had 5 bags of sweets. The average mass of 2 of the bags was 126g. The total mass of the remaining bags was 328 g. Find the average mass of the 5 bags of sweets.

(1) 90.8 g

(2) 116 g

(3) 247.2 g

(4) 580 g

- 5) Callie left Town G at 6.42 p.m. and reached Town K, the next day, at 10a.m.. How long did Callie take to reach Town K?

(1) 3 h 18 min

(2) 3 h 58 min

(3) 15 h 18 min

(4) 15 h 58 min

- 6) In a group of 60 pupils, 25% of them are girls. How many more boys than girls are there?

(1) 10

(2) 15

(3) 30

(4) 45

- 7) Benifon's salary is $\frac{1}{2}$ of Lorriane's salary. Lorriane's salary is $\frac{6}{7}$ of Harifah's salary. What is the ratio of Harifah's salary to the total salary of the three people?

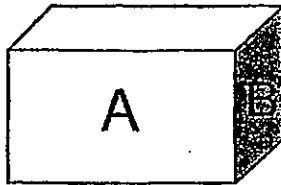
(1) 1 : 2

(2) 7 : 9

(3) 7 : 16

(4) 7 : 25

- 8) The figure shows a cuboid with a volume of 640 m^3 . The shaded face, labelled B, is a square of area 64 m^2 . What is the area of A?



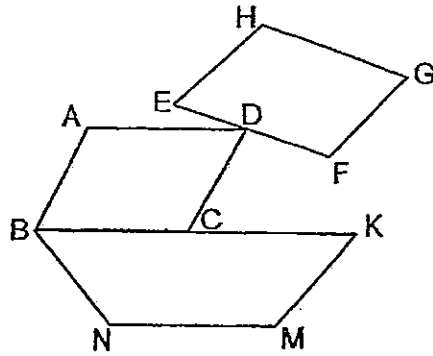
(1) 10 m^2

(2) 40 m^2

(3) 80 m^2

(4) 100 m^2

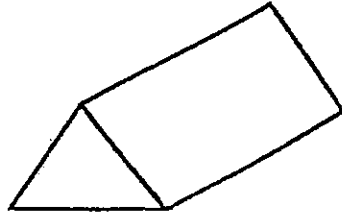
- 9) In the figure, ABCD and EFGH are identical rhombuses and BKMN is a trapezium. Which one of the following statements is true?



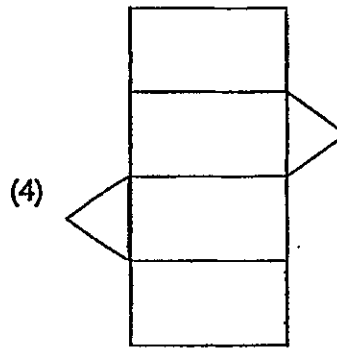
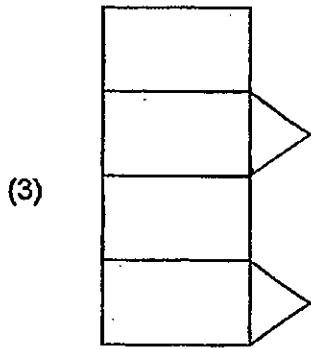
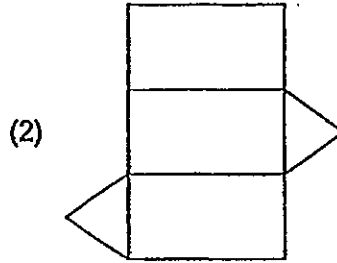
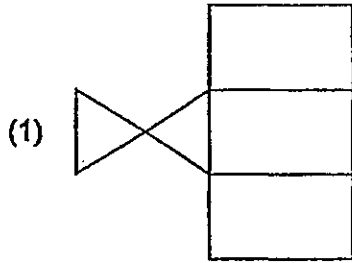
- (1) $HE \parallel GF \parallel KM$ (2) $AB \parallel DC \parallel KM$
- (3) $HG \parallel EF \parallel NM$ (4) $AD \parallel BC \parallel NM$
- 10) The ratio of Hailey's stamps to Irene's stamps was 4 : 9. After Hailey gave half of her stamps to Irene, Hailey had 48 stamps left. How many stamps did Irene have at first?

- (1) 216 (2) 264
- (3) 414 (4) 528

11) The figure below shows a prism.



Which one of the following is a net of the prism?



Name : _____ ()

Class : Primary 6 _____



Primary 6 Mathematics
2013 Preliminary Examination

Paper 1

Booklet B

20 August 2013

TOTAL TIME FOR BOOKLETS A AND B: 50 MINUTES

INSTRUCTIONS TO CANDIDATES

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

WRITE YOUR ANSWERS IN THIS BOOKLET.

THE USE OF CALCULATORS IS NOT ALLOWED.

This booklet consists of 8 printed pages including the cover page.

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space.

16) Find the value of 1069×600 .

Ans: _____

17) Colie bought a pizza and gave $\frac{1}{4}$ of it to his friend. He cut the remainder equally into 9 slices. What fraction of the pizza was each slice?

Ans: _____

18) A bag of 12.67 kg of nuts are re-packed into packets of 70 g each. How many packets were there altogether?

Ans: _____



- 19) Tessa had \$4. She spent 60% of it on a book and 10% of it on some snacks. How much money had she left?

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write in
this space.

Ans: \$ _____

- 20) Study the number pattern below.

$$3 \times 37 = 111$$

$$6 \times 37 = 222$$

$$9 \times 37 = 333$$

: :

: :

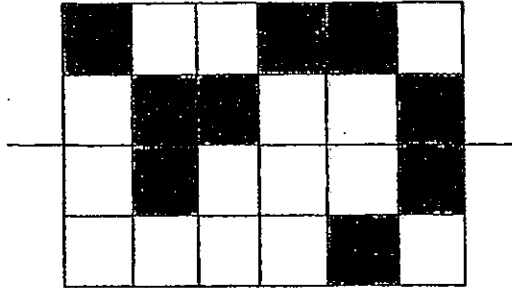
$$G \times 37 = 888$$

Find the value that G represents.

Ans: _____

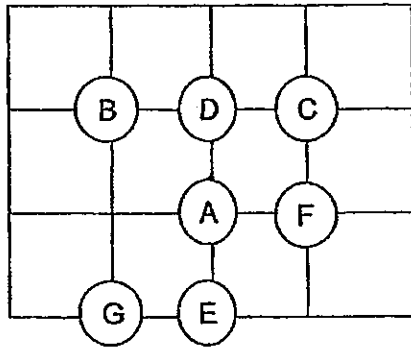


- 21) The figure below is made up of identical squares. Shade three more squares to make a symmetric pattern which has a line of symmetry.



Do not write in this space

- 22) Refer to the square grid below and fill in the blanks with the right answers.



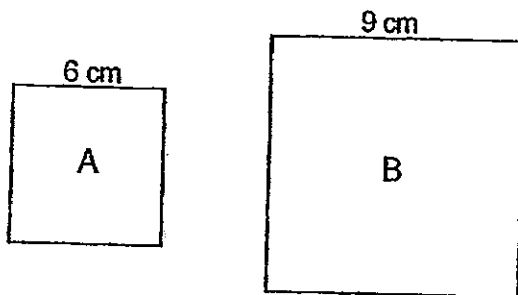
Point A is northeast of point (a) _____ and (b) _____ of point D.

Ans: (a) _____

(b) _____



- 23) The figure below shows two squares.
What fraction of the area of square B is the area of square A?



Ans: _____

- 24) The area of one face of a cube is 49 cm^2 . What is the volume of the cube?

Ans: _____ cm^3

- 25) Alfie travelled 460 km at an average speed of 80 km/h. Find the time Alfie took to cover this distance.

Ans: _____ h

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write in
this space.



Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space.

- 26) Polly has r bookmarks. Kellie has three times as many bookmarks as Polly and 9 more bookmarks than Frilly. How many more bookmarks does Frilly have than Polly? Give your answer in terms of r .

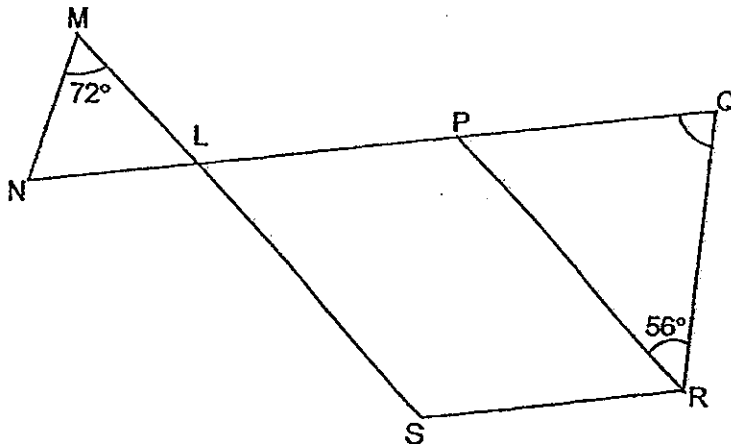
Ans: _____

- 27) At a stationery store, the price of a notepad is $\frac{1}{5}$ the price of a pen. The price of a pack of coloured paper is $\frac{1}{12}$ the total price of the pen and the notepad. What is the ratio of the price of the notepad to the price of the pack of coloured paper?

Ans : _____



- 28) In the figure below, not drawn to scale, LPRS is a parallelogram.
 $ML = NL$ and NQ and MS are straight lines.
 Find $\angle PQR$.



Ans : _____ °

- 29) The mass of 4 pigs is 91.2 kg. One of the pigs has a mass of 36 kg. What is the average mass of the remaining pigs? Give your answer in kilograms and grams.

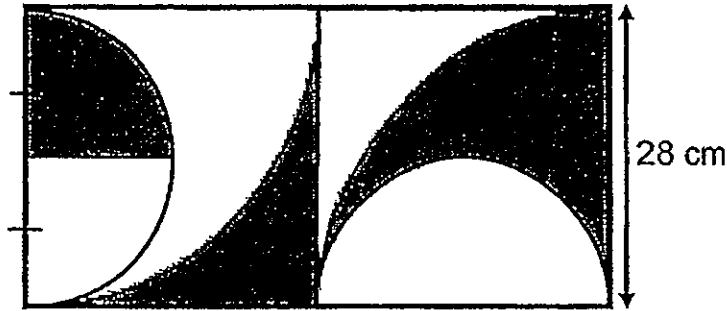
Ans: _____ kg _____ g

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 this space.



30) The figure below is made up of 2 identical quadrants and 2 identical semicircles. Find the area of the shaded part of the figure.

(Take $\pi = \frac{22}{7}$)



Do not write in this space.

Ans: _____ cm²

End of Booklet B



Name : _____ ()

Class : Primary 6 _____



Primary 6 Mathematics

2013 Preliminary Examination

Paper 2

20 August 2013

Parent's/Guardian's Signature

Paper 1	40
Paper 2	60
Total Marks	100

TOTAL TIME FOR PAPER 2: 1 HOUR 40 MINUTES

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

WRITE YOUR ANSWERS IN THIS BOOKLET.

THE USE OF AN APPROVED CALCULATOR IS EXPECTED, WHERE APPROPRIATE.

This booklet consists of 16 printed pages including the cover page.

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space.

-
- 1) Walter had 342 pieces of chocolates. He ate the same number of pieces of chocolates each day. At the end of the 8th day, $\frac{5}{9}$ of the chocolates was left. How many pieces of chocolates did he eat each day?

Ans : _____

- 2) For every watch James sells, he earns a commission of \$32. He will earn an additional \$26 for every 5 watches sold. How much commission will he earn if he sells 52 watches?

Ans : \$ _____



- 3) Mrs Poon had some roses and daisies. $\frac{1}{4}$ of the flowers were roses. After selling 88 roses, $\frac{3}{5}$ of the roses were left. How many daisies did Mrs Poon have?

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write in
this space.

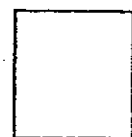
Ans : _____

- 4) Mrs Conchie bought 6 m 20 cm of ribbon and used up $\frac{3}{4}$ of it. She cut the remaining ribbon into 5 equal strips. How long is each strip of ribbon?

Ans : _____ m

- 5) Hui Yee paid \$1224 and \$480 for a television set and DVD player respectively after a discount of 20%. What was the total discount given?

Ans : \$ _____



For questions 6 to 18, show your working clearly and write your answer in the spaces provided. The number of marks available is shown in the brackets () at the end of each question or part-question. (50 marks)

Do not write in this space.

6) There were 1600 animals in Mr Loh's farm. 30% of the animals were ducks and the rest were chickens and geese. The ratio of the number of chickens to the number of geese is 11 : 3. He bought some more ducks and the percentage of ducks increased to 50%.

- a) How many chickens were there?
- b) How many ducks did he buy?

Ans : (a) _____ (3 m)

(b) _____ (2 m)



- 7) Ruth and Steve drove from City X to City Y. The distance between the two cities was 315 km. Ruth left City X 10 minutes after Steve, but arrived at City Y 20 minutes before Steve. Steve's average speed was 90 km/h. Find Ruth's average speed for the whole journey.

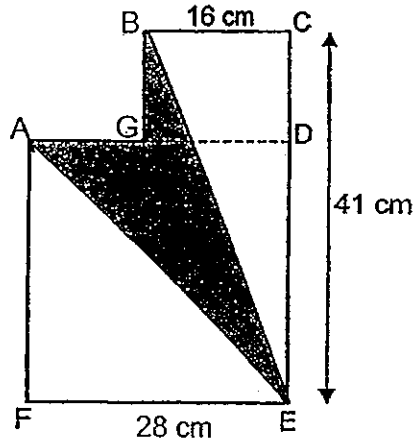
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write in
this space.

Ans : _____ (3 m)



- 8) The figure below is not drawn to scale. ADEF is a square and BCDG is a rectangle. Given that $BC = 16\text{ cm}$, $FE = 28\text{ cm}$ and $CE = 41\text{ cm}$, find the area of the shaded parts AEBG.

Do not write in this space.

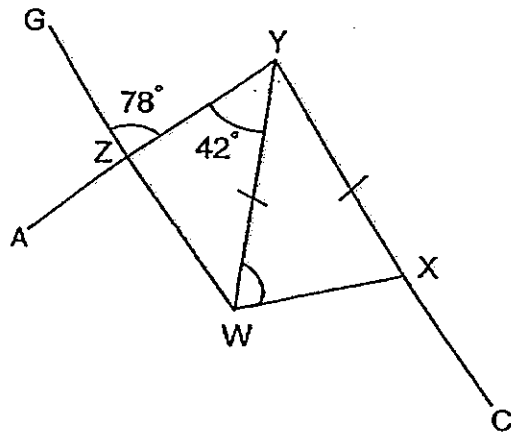


Ans: _____ (4 m)

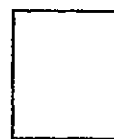


- 9) In the figure below, not drawn to scale, WXYZ is a trapezium. AY, GW and YC are straight lines. Find $\angle YWX$.

Do not write in this space.

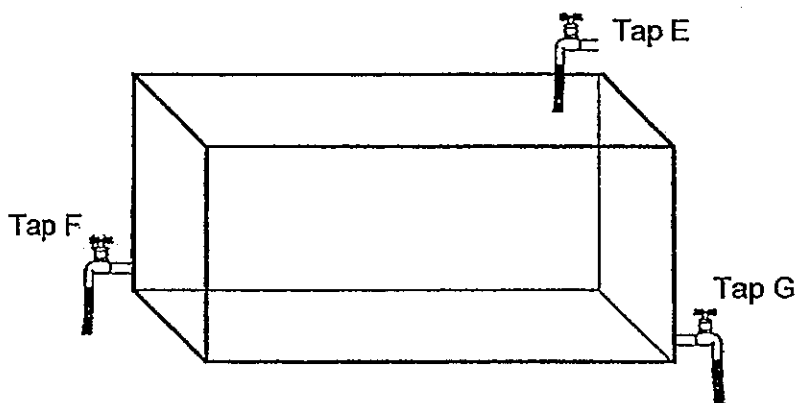


Ans: _____ (3 m)



- 10) An empty rectangular container measures 116.8cm by 25cm by 40cm. Water from Tap E flows into the container at a rate of 5.2 l per minute while Tap F and Tap G drain water from the container at 2.8 l per minute and 1.6 l per minute respectively. Tap E is turned on for 10 minutes before Tap F and Tap G are turned on at the same time. How long does it take for the container to be half-filled with water?

Do not write in this space.



Ans: _____ (4 m)



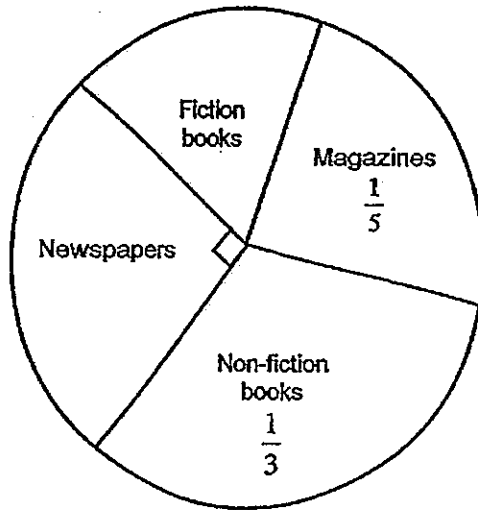
- 11) Four boxes, A, B, C and D, contain some marbles. Box D contains 108 marbles. Box A contains $\frac{3}{4}$ of the total number of marbles in boxes B, C and D. The ratio of the number of marbles in box B to the total number of marbles in boxes C and D is 1 : 3. Box C contains 4 times the number of marbles in box D. How many marbles are there altogether in the four boxes?

Do not
write in
this space.

Ans: _____ (4 m)



- 12) The pie chart below shows the number of items sold in a bookstore in a month. How many newspapers were sold if 845 fiction books were sold?



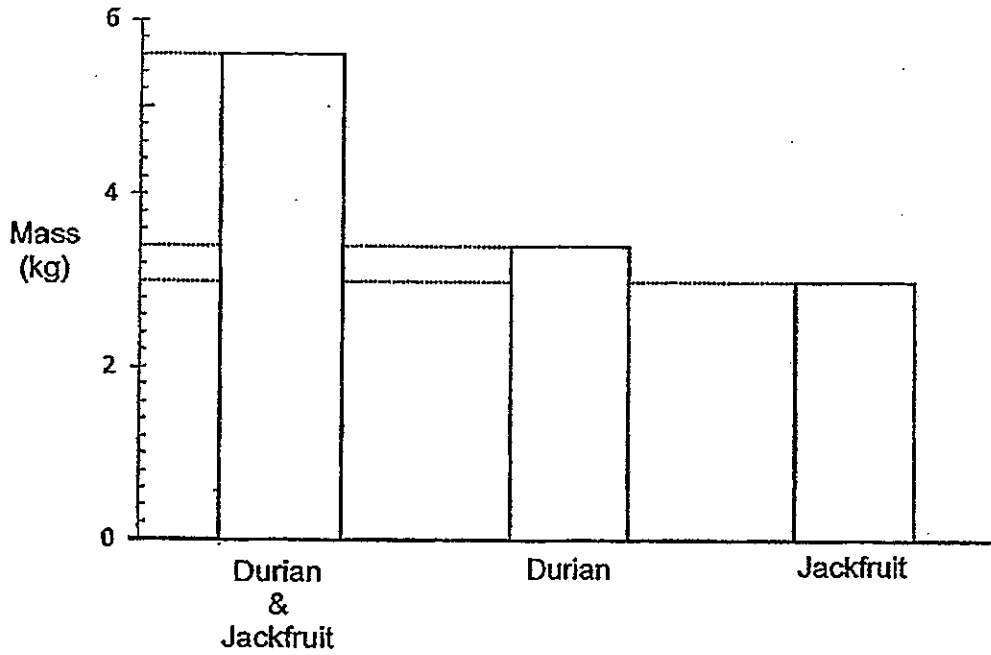
Do not write in this space.

Ans: _____ (3 m)



- 13) The graph below shows the mass of three identical baskets with different combinations of durian and jackfruit placed in it.

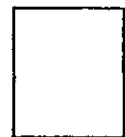
Do not write in this space.



- a) What is the mass of the basket?
b) What is the average mass of a durian and a jackfruit?

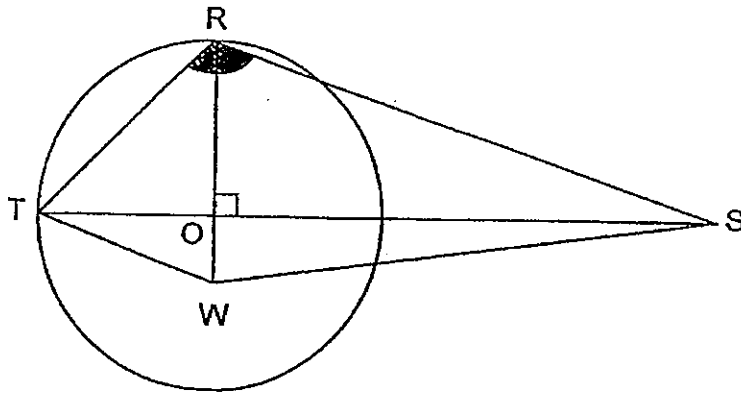
Ans: (a) _____ (2 m)

(b) _____ (2 m)



- 14) The figure below, not drawn to scale, is a circle with O as the centre. TS and RW are straight lines. The ratio of $\angle RSO$ to $\angle OSW$ is $2 : 1$. $\angle SWO = 73^\circ$. Find $\angle TRS$.

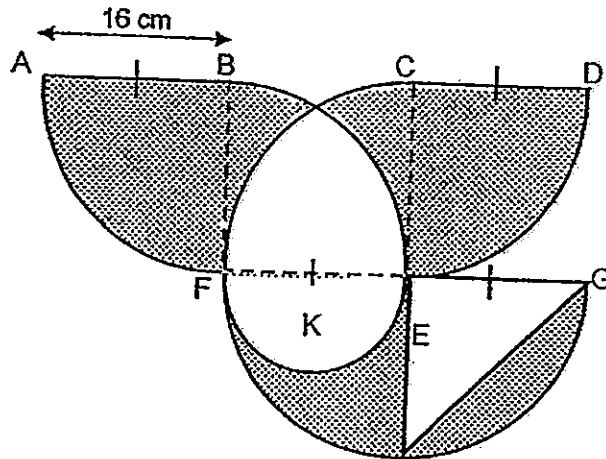
Do not write in this space.



Ans : _____ (3 m)



- 15) The figure is made up of 6 identical quadrants, a semicircle K and a triangle. The total area of the unshaded parts in the figure is 370 cm^2 . Find the total area of the shaded parts. (Take $\pi = 3.14$)



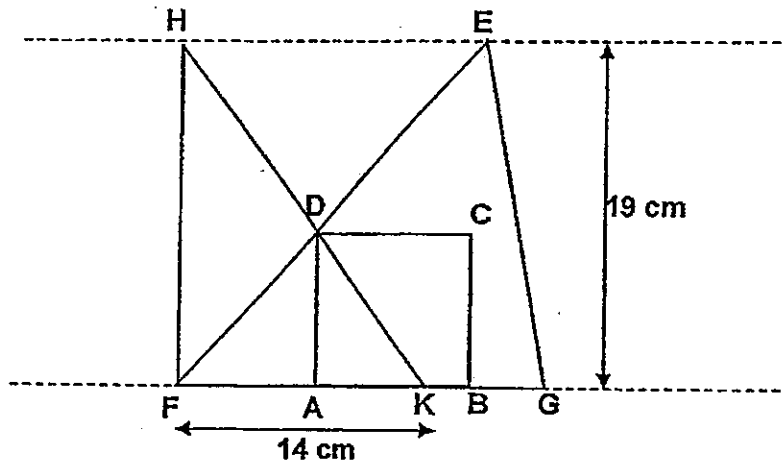
Do not write in this space.

Ans: _____ (5 m)



- 16) The figure below, not drawn to scale, is made up of a square ABCD and two triangles EFG and FKH, overlapping one another. The square has an area of 81 cm^2 . FK is 14 cm and it is $\frac{2}{3}$ of the length of FG. Find the area of the figure.

Do not write in this space.

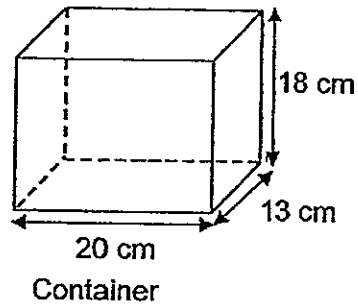
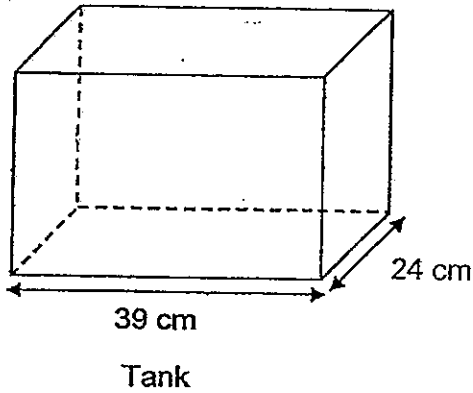


Ans: _____ (3 m)



17) The figure below shows a tank 39 cm long and 24 cm wide. It was half-filled with water to a depth of 18 cm. Water was poured from the tank into an empty container 20 cm by 13 cm by 18 cm until the container was 80 % filled with water.

- a) What was the final water level in the tank?
- b) How much water was needed to fill up the entire tank?



Do not write in this space.

Ans: (a) _____ (3 m)

(b) _____ (2 m)



18) There were 1 570 pupils in a school at the beginning of the year. The ratio of the number of Chinese pupils to Malay pupils to Indian pupils was 5 : 3 : 2. In the middle of the year, 463 Chinese pupils joined the school while some Malay pupils and Indian pupils left the school. The percentage of Chinese pupils increased to 78% while the number of Malay pupils is equal to the number of Indian pupils.

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space.

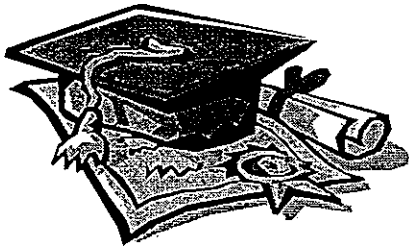
- (a) How many Indian pupils left the school in the middle of the year?
- (b) What is the percentage decrease in the number of Indian pupils?
Leave your answer correct to 1 decimal place.

Ans: a) _____ (3 m)

b) _____ (1 m)

End of Paper





ANSWER SHEET

EXAM PAPER 2013

SCHOOL : CHIJ

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	1	3	2	3	3	3	3	4	1	2	3	1	2	1

16)641400

17)1/12

18)181

19)\$1.20

20)24

21)

22)a)G

b)South

23)4/9

24)343cm³

25)5³/4h

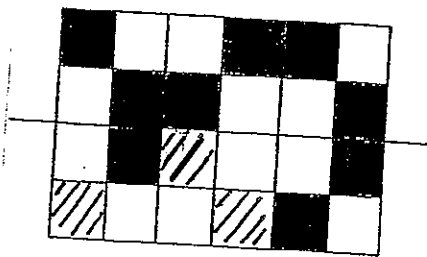
26)2r - 9

27)2 : 1

28)88°

29)18kg 400g

30)630cm²



Paper 2

1) $1 - 5/9 = 4/9$

$342 \times 4/9 \div 8 = 19$

2) $(32 \times 5) + 26 = 186$

$52 \div 5 = 10R2$

$186 \times 10 = 1860$

$2 \times 32 = 64$

$64 + 1860 = \$1924$

3) $88/2 \times 5 \times 3 = 660$

4) $6.2 \times \frac{1}{4} \div 5 = 0.31m$

5) $(1224 + 48) \div 4 = \$426$

6) $1600 \div 20 = 80$

$80 \times 11 = 880$

$14 - 6 = 8$

$80 \times 8 = 640$

a) 880

b) 640

7) $315 \div 90 = 3.5$

$3\frac{1}{2} - \frac{1}{3} - \frac{1}{6} = 3$

$315 \div 3 = 105km/h$

8) $\frac{1}{2} \times 16 \times 13 = 104$

$\frac{1}{2} \times 12 \times 28 = 168$

$168 + 104 = 272cm^2$

9) $180^\circ - 78^\circ = 102^\circ$

$180^\circ - 102^\circ - 42^\circ = 36^\circ$

$(180^\circ - 36^\circ) \div 2 = 72^\circ$

10) $5.2 \times 10 = 52$

$40 \times 25 \times 116.8 \times \frac{1}{2} = 58400$

$5.2 - 2.8 - 1.6 = 0.8$

$58.4 - 52 = 6.4$

$6.4 \div 0.8 = 8$

$8 + 10 = 18min$

11) $(432 + 108) \div 3 = 180$

$(180 + 108 + 432) \div 4 \times 3 = 540$

$540 + 180 + 432 + 108 = 1260$

12) $1 - \frac{1}{4} - \frac{1}{5} - \frac{1}{3} = \frac{13}{60}$

$845 \div 13 \times 60 \times \frac{1}{4} = 975$

13) a) $(3 + 3.4) - 5.6 = 0.8kg$

b) $(5.6 - 0.8) \div 2 = 24kg$

$$14)(180^\circ - 90^\circ - 73^\circ) \times 2 = 34^\circ$$
$$45^\circ + (180^\circ - 34^\circ - 90^\circ) = 101^\circ$$

$$15) 3.14 \times 16 \times 6/4 = 1205.76$$
$$3.14 \times 16 \div 2 = 401.92$$
$$3.14 \times 8 \div 2 = 100.48$$
$$16 \times 16 \times 0.5 = 128$$
$$370 - 128 - 100.48 = 141.52$$
$$1205.76 - 128 - 100.48 - (141.52 \times 2) = 694.24\text{cm}^2$$

$$16) \sqrt{81} = 9$$

$$14 \div 2 = 7$$
$$14 + 7 = 21$$
$$\frac{1}{2} \times 19 \times 21 = 199.5 \text{ (EFG)}$$
$$\frac{1}{2} \times 14 \times 9 = 63$$
$$\frac{1}{2} \times 14 \times 19 = 133$$
$$133 - 63 = 70 \text{ (HDF)}$$
$$70 + 199.5 = 269.5\text{cm}^2$$

$$17) a) 18 \times 39 \times 24 = 16848$$
$$20 \times 13 \times 18 \times 80\% = 3744$$
$$16848 - 3744 = 13104$$
$$13104 \div 39 \div 24 = 14\text{cm}$$
$$b) 36 - 14 = 22$$
$$22 \times 24 \times 39 = 20592\text{cm}^3$$

$$18) 5u + 463 = 78p$$
$$1570 \div 10 = 157 \text{ (1u)}$$
$$785 + 463 = 78p$$
$$1248 = 78p$$
$$16 = 1p$$
$$176 = 11p$$
$$314 = 2u$$
$$314 - 176 = 138$$
$$138/314 \approx 43.9\%$$

$$a) 138$$
$$b) 43.9\%$$



METHODIST GIRLS' SCHOOL (PRIMARY)
Founded in 1887



PRIMARY 6 PRELIMINARY EXAMINATION 2013
MATHEMATICS
PAPER 1
(BOOKLET A)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS)
provided.

The use of calculators in NOT allowed.

Name: _____ ()

Class: Primary 6. _____

Date: 26 August 2013

This booklet consists of 6 printed pages.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical
Answer Sheet. (20 marks)

1 Find the quotient when 4 029 is divided by 4.

- (1) 1
- (2) 17
- (3) 1 07
- (4) 1 007

2 In 50.31, what does the digit 1 stands for?

- (1) 1 one
- (2) 1 tenth
- (3) 1 hundredth
- (4) 1 thousandth

3 Hot dogs are sold at \$1.70 each, or 2 for \$3.00. Meiling had \$17.
What is the maximum number of hotdogs that she can buy?

- (1) 9
- (2) 10
- (3) 11
- (4) 12

4 John needs 250 g of minced beef to make 3 plates of spaghetti. He invited 9
friends over for dinner. How much minced beef does he need to make 9
plates of spaghetti?

- (1) 0.75 kg
- (2) 2.25 kg
- (3) 6.75 kg
- (4) 7.50 kg

5 Which of the following would be the most likely area of the floor of your
classroom in school, which is in the shape of a square?

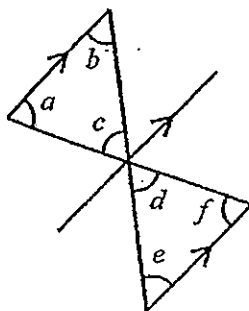
- (1) 4 m²
- (2) 25 m²
- (3) 81 m²
- (4) 400 m²

- 6 The table below shows the number of families who own pets.

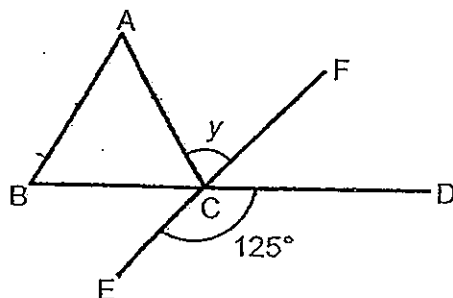
Number of families	Number of pets
20	1
10	2
8	3
5	4

How many families own at least 2 pets?

- (1) 10
 (2) 18
 (3) 23
 (4) 30
- 7 Which one of the following statements is true?



- (1) $\angle a = \angle e$
 (2) $\angle b = \angle d$
 (3) $\angle c = \angle f$
 (4) $\angle b = \angle e$
- 8 In the diagram below, ABC is an equilateral triangle. BD and EF are straight lines. Find $\angle y$.



- (1) 55°
 (2) 60°
 (3) 62.5°
 (4) 65°

- 9 Which letters in the word below have at least 2 lines of symmetry?

H O U S E

- (1) O, E
(2) H, O
(3) S, U
(4) H, S
- 10 Find the value of $7 + \frac{6y}{7}$ when $y = 8$.

(1) $8\frac{1}{7}$

(2) $9\frac{3}{8}$

(3) $13\frac{6}{7}$

(4) $15\frac{7}{8}$

- 11 $\frac{1}{9} + \frac{2}{9} + \frac{4}{9} = \boxed{?} \times 4 + \frac{1}{3}$
What is the missing value in the box?

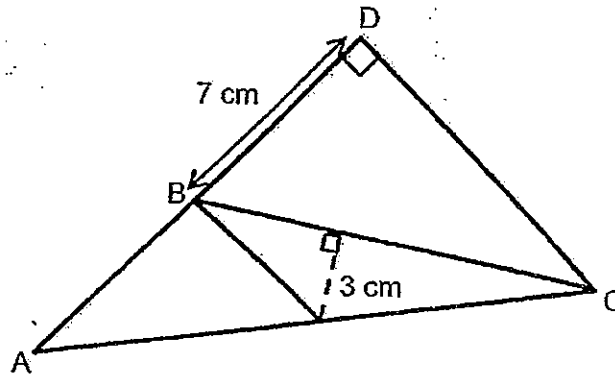
(1) $\frac{1}{9}$

(2) $\frac{3}{9}$

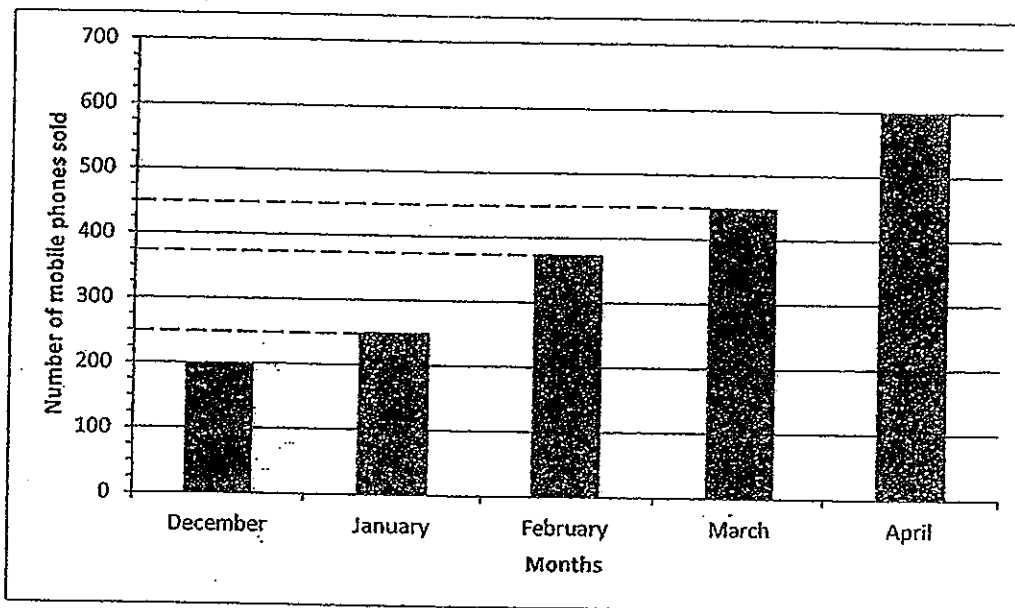
(3) $\frac{4}{9}$

(4) $\frac{5}{9}$

- 12 In the figure below, $AC = 15$ cm, $CD = 9$ cm and $AD = 12$ cm. What is the area of triangle ABC ?



- (1) 7.5 cm^2
 (2) 31.5 cm^2
 (3) 22.5 cm^2
 (4) 37.5 cm^2
- 13 The bar graph below shows the number of mobile phones sold over a period of 4 months. Between which two months was there a 50% increase in the sales?



- (1) December and January
 (2) January and February
 (3) February and March
 (4) March and April

14 Pillay scored an average of 67 marks in the last 3 topical tests. How many marks must he score in the fourth test so that he can get an average of 73 marks?

- (1) 72
- (2) 79
- (3) 85
- (4) 91

15 Raymond saves 40% of his salary every month. If his salary increases by 15%, his savings will also increase by \$120. What is Raymond's salary?

- (1) \$800
- (2) \$1200
- (3) \$1550
- (4) \$2000

METHODIST GIRLS' SCHOOL (PRIMARY)

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PRIMARY 6 PRELIMINARY EXAMINATION 2013 MATHEMATICS

PAPER 1

(BOOKLET B)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of calculators in NOT allowed.

Name: _____ ()

Class: Primary 6. _____

Date: 26 August 2013

Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
TOTAL	/ 100

This booklet consists of 7 printed pages.

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

16 Find the largest whole number that gives 3 000 when rounded off to the nearest hundred.

Ans: _____

17 Find the value of $8 \div \frac{3}{5}$.
Express your answer as a mixed number.

Ans: _____

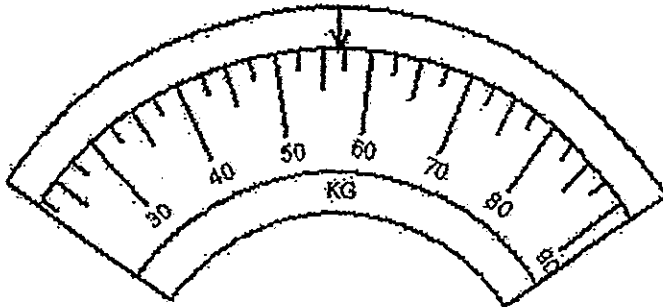
18 Express 3 hundreds, 6 tenths and 55 thousandths in decimal.

Ans: _____

19 A pitcher can contain 1.4 litres of juice. It can fill 8 glasses. If each glass contains the same amount of juice, how much juice is there in each glass?

Ans: _____ ml

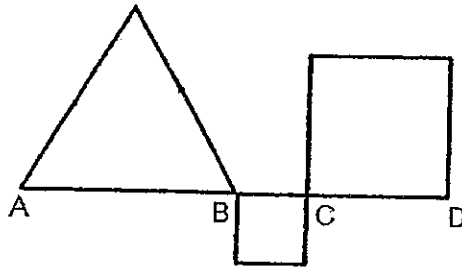
- 20 Look at the scale below. Round off the mass shown on the scale to the nearest whole number.



Ans: _____ kg

Do not write
in this space

- 21 The figure below is made up of 2 squares and an equilateral triangle. The ratio of the length of AB to the length of BC to the length of CD is 3 : 1 : 2. The length of AD is 24 cm. Find the perimeter of the figure below.



Ans: _____ cm

- 22 Express 3.8 as a percentage.

Ans: _____ %

23. The difference in mass between two girls is 12 kg. If their total mass is 68 kg, what is the ratio of the mass of the heavier girl to the mass of the lighter girl?

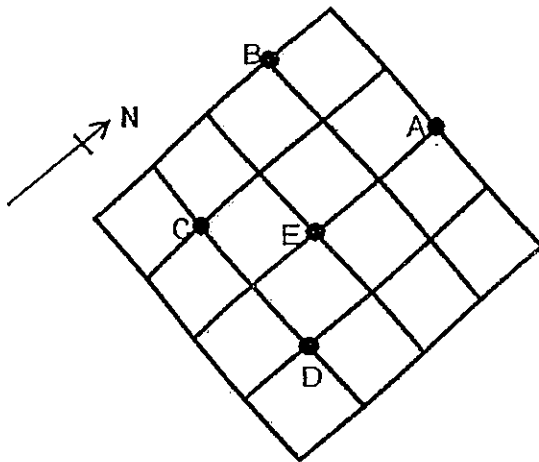
Do not write
in this space

Ans: _____

- 24 David is at Point E. He followed the following instructions:

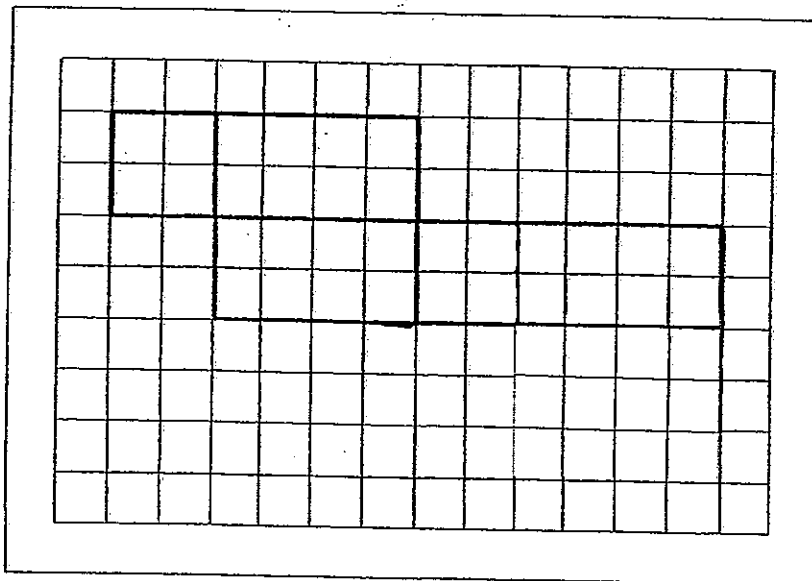
- (i) Walk 2 squares to the East.
- (ii) Walk 1 square to the North.
- (iii) Walk 3 squares to the West.
- (iv) Walk 2 squares to the South

Which point did he end up at?



Ans: _____

- 25 Draw in the missing face(s) in the grid below to complete the net of a cuboid.



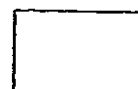
Do not write
in this space



Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 26 A number is between 10 and 50. It is a multiple of 8 and a factor of 96. What are all the possible values of the number?

Ans: _____



27 Amy's allowance is $\frac{3}{8}$ of Beatrice's allowance.

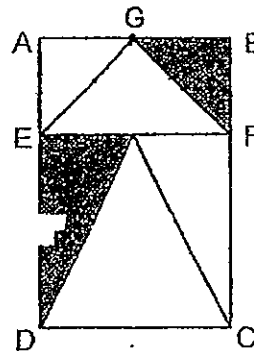
Cai Fang's allowance is $\frac{3}{4}$ of Beatrice's allowance.

Express Beatrice's allowance as a fraction of the total allowance of Amy and Cai Fang.

Do not write
in this space

Ans: _____

28 In the diagram below, the length of DE is twice the length of EA. G is the mid-point of AB and AE = AG. EFG and DCH are isosceles triangles. The area of ABCD is 72 cm^2 . What is the area of the shaded region?



Ans: _____ cm^2

- 29 Ahmad boarded the Jungle Train at the Woodlands Train Station in Singapore at 5.30 a.m. for Kota Bahru in Malaysia. He arrived in Kota Bahru at 19 25. How long was the train ride?

Do not write
in this space

Ans: _____ h _____ min

- 30 The table below shows the rate of charges for each overdue DVD borrowed from a library.

For the first 5 days	50 cents per day
After 5 days	70 cents per day

Mei Li borrowed two DVDs from the library. The two DVDs were overdue when she returned it. She paid a total of \$7.80 in overdue fines. How many days were the two DVDs overdue?

Ans: _____

END OF PAPER

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



PRIMARY 6 PRELIMINARY EXAMINATION 2013 MATHEMATICS

PAPER 2

Duration: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

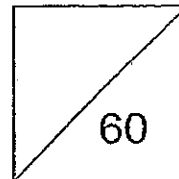
Write your answers in this booklet.

The use of an approved calculator is expected, where appropriate.

Name: _____ ()

Class: Primary 6. _____

Date: 26 August 2013



This booklet consists of 15 printed pages.

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write
in this space

- 1 Yan Ning has \$22 worth of coins. She has 16 more fifty-cent coins than twenty-cent coins. Find the total value of her twenty-cent coins.

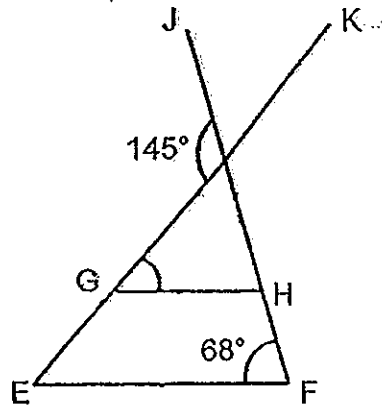
Ans: \$ _____

- 2 The average height of 2 girls is 1.24 m and the average height of another 3 girls is 1.54 m. What is the average height of all the 5 girls?

Ans: _____ m

- 3 In the diagram below, EF is parallel to GH and JF and KE are straight lines. Find $\angle KGH$.

Do not write in this space



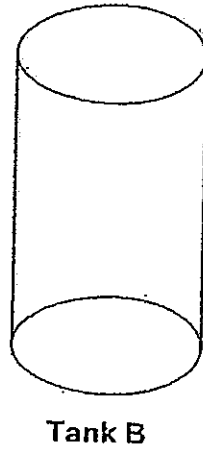
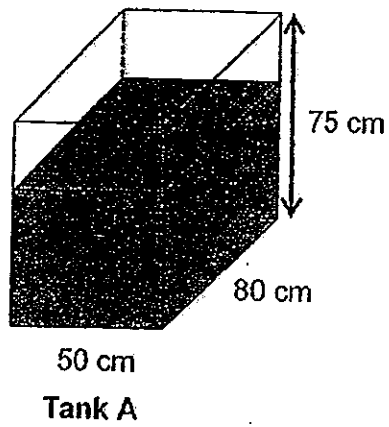
Ans: _____°

- 4 During the Great Singapore Sale, a store gave a storewide discount of 20%. Mrs Heng who is a member of the store was entitled to an additional 10% discount on the discounted price. What was the total discount Mrs Heng enjoyed?

Ans: _____%

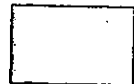
- 5 Two tanks are shown below. Tank A is filled with water to two-thirds of its height. All the water in Tank A is then poured into a cylindrical tank, Tank B, which has a circular base of radius 28 cm. What is height of the water level in Tank B? Give your answer correct to 1 decimal place.

(Take $\pi = \frac{22}{7}$)



Do not write
in this space

Ans: _____ cm



For Questions 6 to 18, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

Do not write in this space

- 6 Gordon's age is $\frac{3}{7}$ of Thomas. In 18 years' time, Gordon's age will be $\frac{3}{5}$ of Thomas. How old will Thomas be then?

Ans: _____ [3]

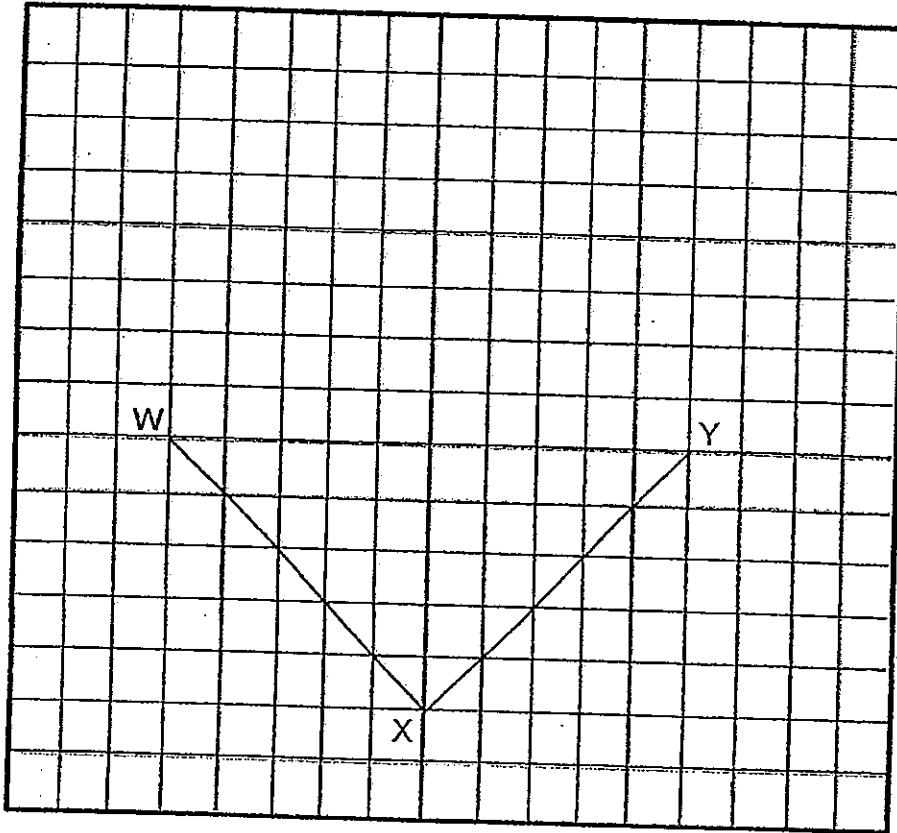
- 7 A wire is bent to form a circle of radius 35 cm. Another wire, of the same length, is bent to form of a square. What is the area of the square?
(Take $\pi = \frac{22}{7}$)

Ans: _____ [3]
(Go on to the next page)

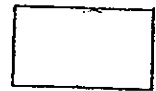
8 In the grid below, two sides of a rhombus, $WXYZ$, have been drawn.

(a) Complete the drawing of the rhombus. Label the point Z . [2]

(b) Measure $\angle XYZ$.



Ans: (b) _____ [1]



Do not write
in this space

- 9 A robot can type 340 words every 5 minutes.
At this rate, how long will it take the robot to complete typing 5780 words?
Express your answer in hour and minutes.

Ans: _____ [3]

- 10 Ben is 15 years old. Cathy is p years older than Ben and two times as
old as Daniel. What is the average age of Ben, Cathy and Daniel?

Ans: _____ [3]

11 Zoe spent $\frac{2}{7}$ of her money on a book and $\frac{1}{3}$ of the remainder on a pair of shoes. She spent the remaining \$49 on food.

- (a) What fraction of her money did she spend on the pair of shoes?
(b) How much money did Zoe have at first?

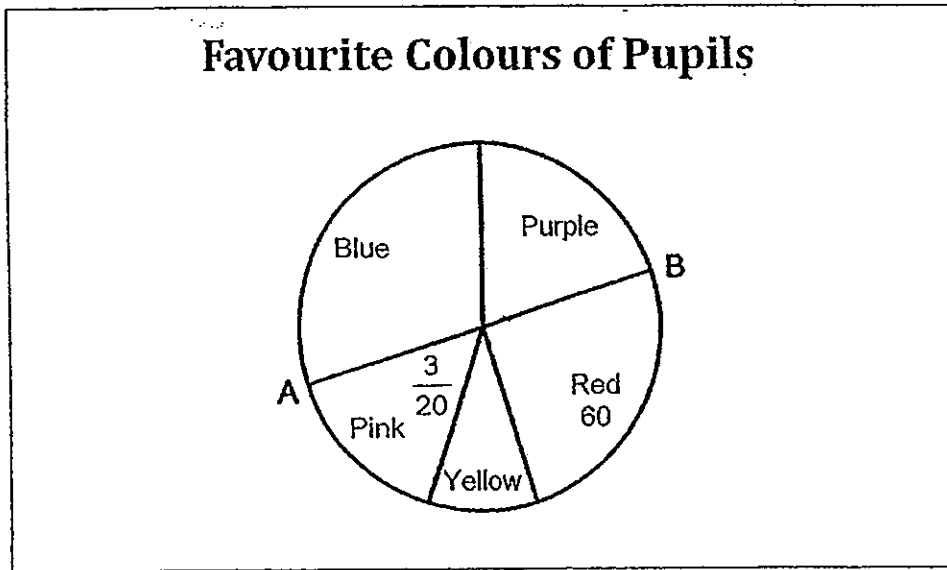
Ans: (a) _____ [1]

(b) _____ [3]

12

The pie chart shows the favourite colours of the Primary 6 pupils in Sophia Primary School. AB is a straight line.

Do not write
in this space



- (a) How many pupils are there in Primary 6?
(b) There are twice as many pupils who like purple than yellow.
What percentage of the Primary 6 pupils like purple?
(c) How many pupils like blue?

Ans: (a) _____ [1]

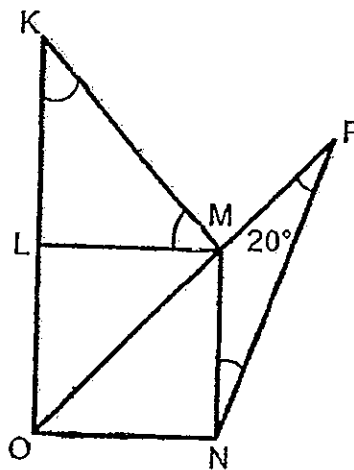
(b) _____ [2]

(c) _____ [1]



13 In the diagram below, $KM = MO$. $LMNO$ is a square and KLM is a right-angled triangle.

- (a) Find $\angle KMO$.
 (b) Find $\angle MNP$.



Do not write
in this space

Ans: (a) _____ [1]
 (b) _____ [3]



15 Farmer Brown had a total of 632 chickens and ducks. After he bought another 54 chickens and sold 12.5% of the ducks, the ratio of the number of chickens to the number of ducks was 6 : 7 respectively.

Do not write
in this space

- (a) How many chickens were there at first?
(b) Express the number of chickens as a fraction of the number of ducks at first.

Ans: (a) _____ [2]

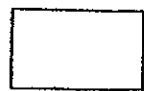
(b) _____ [2]



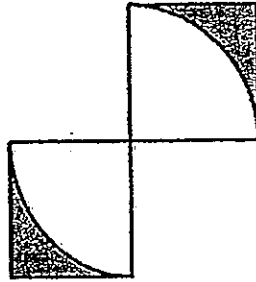
16 Both Fang Ling and Shanti collect stickers. If Fang Ling used 12 stickers, Shanti would have half as many stickers as her. If Shanti used 18 stickers, Fang Ling would have 5 times as many stickers as her. How many stickers did they have altogether?

Do not write in this space.

Ans: _____ [5]



- 17 The picture below is made up of 2 similar squares and 2 similar quadrants. The area of one square is 64 cm^2 .



- (a) Find the area of the shaded region.
(b) Find the perimeter of the unshaded region.
(Take $\pi = 3.14$)

Do not write
in this space

Ans: (a) _____ [3]

(b) _____ [2]



18. There were 3 boxes, X, Y and Z, containing 172 fruits altogether. Mrs Teo added some fruits into Box X and the number of fruits in Box X doubled. She removed $\frac{2}{3}$ of the number of fruits from Box Y and added another 20 fruits into Box Z. In the end, the number of fruits in Box X, Y and Z are in the ratio of 6 : 3 : 4 respectively.
- (a) How many fruits were there in Box Y at first?
(b) What is the ratio of number of fruits in Box Z to the total number of fruits at first?

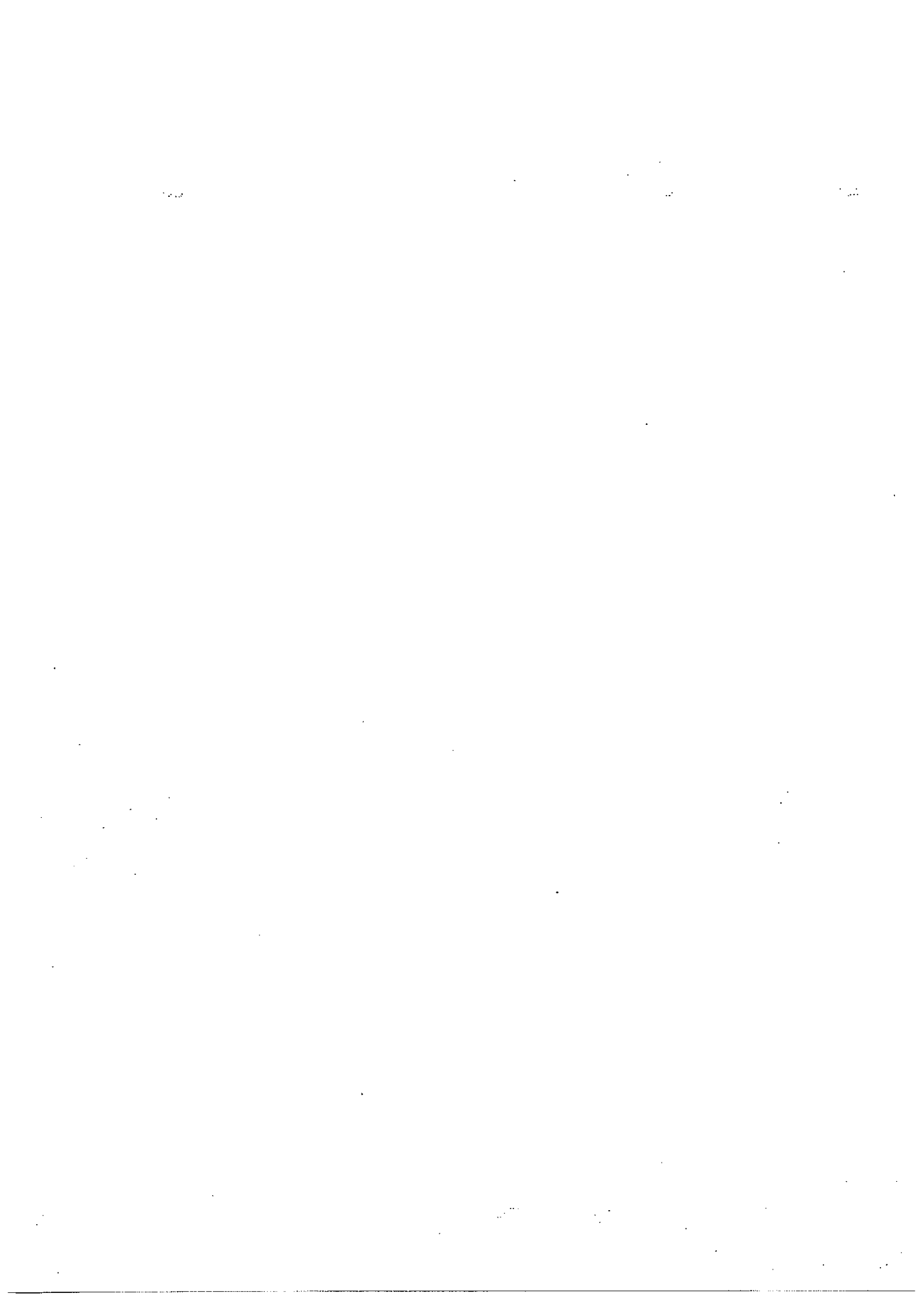
Do not write
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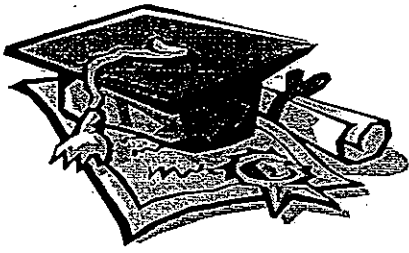
Ans: (a) _____ [3]

(b) _____ [2]



END OF PAPER





ANSWER SHEET

EXAM PAPER 2013

SCHOOL : MGS

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : PRELIM

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
4	3	3	1	3	3	4	4	2	3	1	3	2	4	4

16)3049

17) $13\frac{1}{3}$

18)300.655

19)175ml

20)57kg

21)84 cm

22)380 %

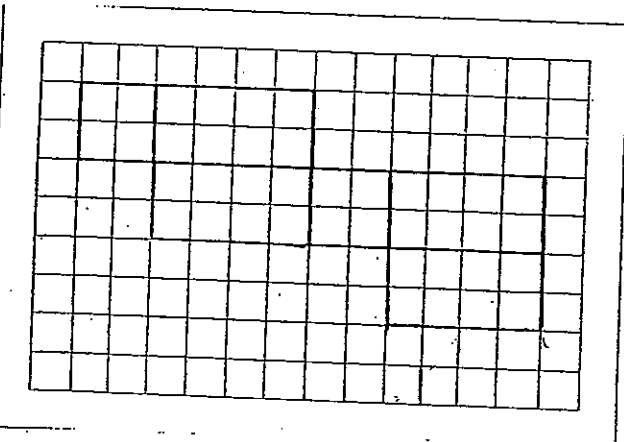
23)10:7

24)Point C

25)

26)16,24,32,48

27) $\frac{8}{9}$



28)18 cm²

29)13 h 55 min

30)7 days

Paper 2

1) $16 \times 50 = 800$
 $\$22 = 2200c$
 $2200 - 800 = 1400$
 $50 + 20 = 70$
 $1400 \div 70 = 20$
 $20 \times 20 = 400$
 $400c = \$4$

2) $1.24 \times 2 = 2.48$
 $1.54 \times 3 = 4.62$
 $4.62 + 2.48 = 7.1$
 $3 + 2 = 5$
 $7.1 \div 5 = 1.42$
The average height is 1.42 m

3) $180 - 145 = 35$ ($\angle GAH$)
 $\angle JHG = \angle JFE = 68^\circ$
 $180 - 35 - 68 = 77^\circ$

4) $100 - 20 = 80$
 $100 - 10 = 90$
 $90/100 \times 80 = 72$
 $100 - 72 = 28\%$

5) $(75 \div 3) \times 2 = 50$ (2/3 height A)
 $50 \times 80 \times 50 = 200000$
 $22/7 \times 28 \times 28 = 2464$
 $200000 \div 2464 \approx 81.2$ cm

6) $10 - 7 = 3$
 $18 \div 3 = 6$
 $6 \times 10 = 60$ years old 8)a)

7) $35 \times 2 = 70$ (diameter)
 $22/7 \times 70 = 220$
 $220 \div 4 = 55$
 $55 \times 55 = 3025$ cm²

8)b) 90°

- 9) 1 robot → 340 words → 5 min
1 robot → 5780 words → 85 min

$$\frac{5780 \times 5}{340} = 85$$

$$85 \text{ min} = 1 \text{ h } 25 \text{ min}$$

- 10) $12.5 + 0.5p$ years old

11) a) $\frac{1}{3} = \frac{5}{15}$

$$7 \times 3 = 21$$

$$\frac{5}{21} = \frac{5}{21}$$

She spent $\frac{5}{21}$ of the money on the shoes.

b) $49 \div 2 = 24.5$

$$24.5 \times 3 = 73.5$$

$$73.5 \div 15 = 4.9$$

$$4.9 \times 21 = 102.9$$

She had \$102.90 at first.

12) a) $60 \times 4 = 240$

There are 240 pupils in Primary 6.

b) $\frac{1}{2} \times 240 = 120$

$$\frac{3}{20} \times 240 = 36$$

$$120 - 60 - 36 = 24 \text{ (Y)}$$

$$24 \times 2 = 48$$

$$\frac{48}{240} \times 100\% = 20\%$$

20% of the Primary 6 pupils like purple.

c) $240 - 60 - 36 - 24 - 28 = 72$

72 pupils like blue.

13) a) $90 \div 2 = 45$

$$45 \times 2 = 90$$

$$180 - 90 = 90$$

It is 90°

b) $180 - 45 - 135$

$$180 - 135 - 20 = 25$$

It is 25°

14)a) $75 \times 1\frac{3}{4} = 131.25$

$8 - 3 = 5$

$(131.25 \div 5) \times 8 = 210$

The total distance is 210km.

b) $\frac{3}{8} \times 210 = 78.75$

$78.75 \div 90 = \frac{7}{8}$

$\frac{7}{8} + 1\frac{3}{4} + \frac{1}{4} = \frac{27}{8}$

$210 \div \frac{27}{8} = 73\frac{1}{23}$

The average speed is $73\frac{1}{23}$ km/h

15)a) $100 - 12.5\% = 87.5\%$ (ducks left)

7u \rightarrow 87.5%

8u \rightarrow 100%

$8 + 6 = 14$

$632 + 54 = 686$

$686 \div 14 = 49$

$49 \times 6 = 294$

$294 - 54 = 240$

There were 240 chickens at first

b) $632 - 240 = 392$ (ducks at first)

$\frac{240}{392} = \frac{30}{49}$

The fraction is $\frac{30}{49}$

16) $3p = 48$

$p = 16$

$6p = 96$

$96 + 18 = 114$

They have 114 stickers altogether.

17)a) $\sqrt{64} = 8$

$0.25 \times 3.14 \times 8 \times 8 = 50.24$

$8 \times 8 = 64$

$64 - 50.24 = 13.76$

$13.76 \times 2 = 27.52$

The area is 27.52cm²

b) $8 \times 2 = 16$ (diameter)

$3.14 \times 16 \times 0.5 = 25.12$

$25.12 + 8 + 8 + 8 + 8 = 57.12$

It is 75.12cm

18)a) $3 \times 3 = 9$

$6 \div 2 = 3$

$172 + 20 = 192$

$192 \div (3+9+4) = 12$

$12 \times 9 = 108$

There were 108 fruits.

b) $12 \times 4 = 48$

$48 - 20 = 28$

Z : T+L

28:172

7:43

The ratio is 7:43

