

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?

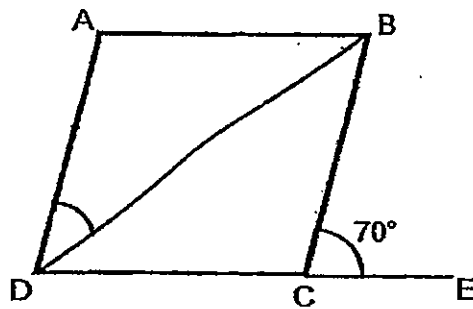
(1) $(2y + 7)$ cm

(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°

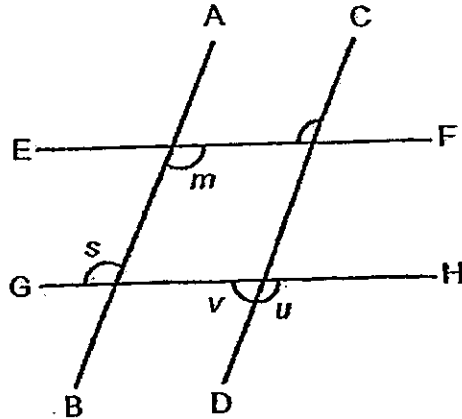
(2) 45°

(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 $\angle m$.



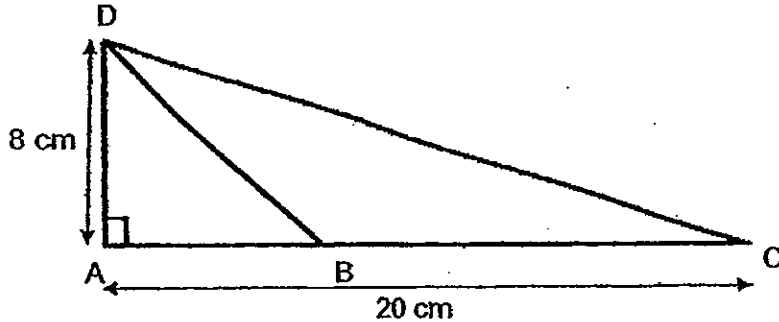
- (1) $\angle s$
 (2) $\angle t$
 (3) $\angle u$
 (4) $\angle v$
- 5 How many eighths are there in $2\frac{3}{4}$?
- (1) 9
 (2) 11
 (3) 16
 (4) 22
- 6 The mass of butter, flour and sugar are mixed in the ratio 3 : 4 : 5 to bake a cake. The mass of the cake is 720 g. Find the mass of the butter that was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

- 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)

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CONTINUAL ASSESSMENT 2013 PRIMARY 6 MATHEMATICS

PAPER 1 (BOOKLET A)

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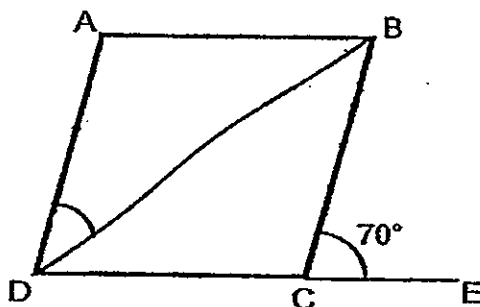
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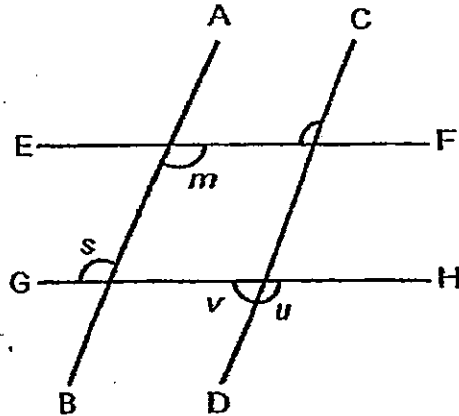
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(Go on to the next page)

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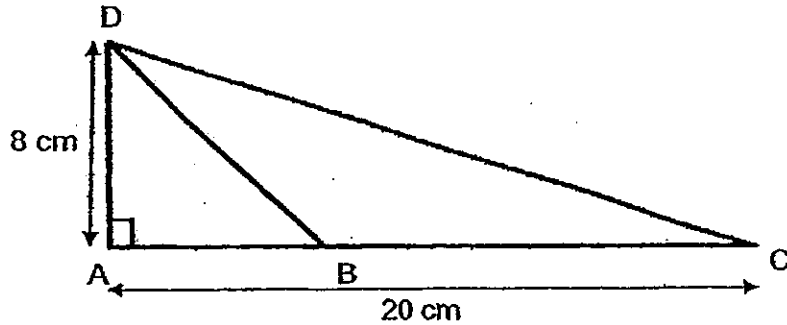
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(Go on to the next page)



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CONTINUAL ASSESSMENT 2013 PRIMARY 6 MATHEMATICS

PAPER 1 (BOOKLET B)

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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

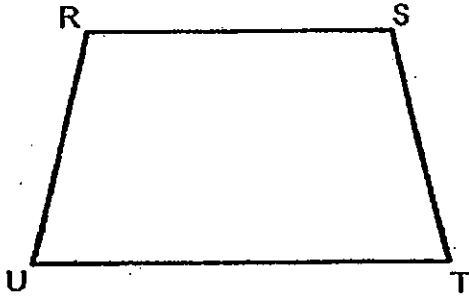
Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
TOTAL	/ 100

This booklet consists of 8 printed pages including this page.

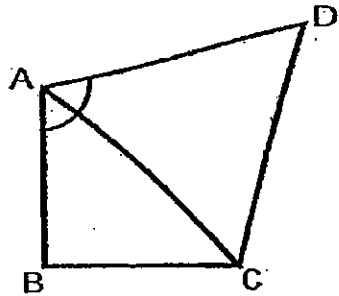
Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated.

(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 .

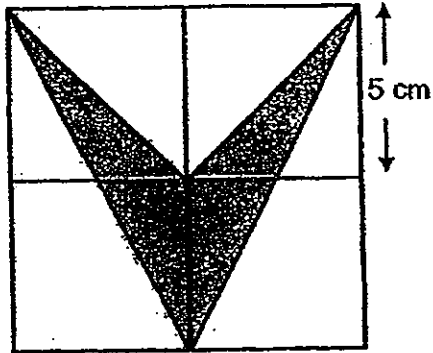
Ans: \$ _____

- 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)

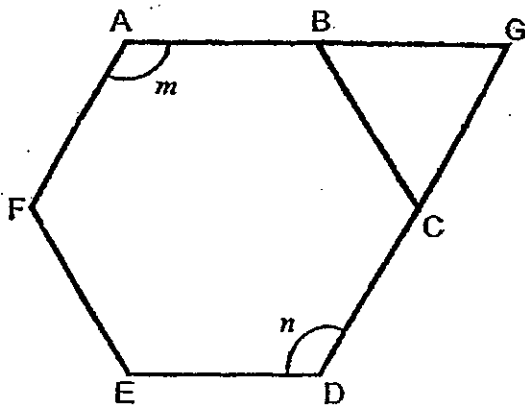
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(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: \$ _____

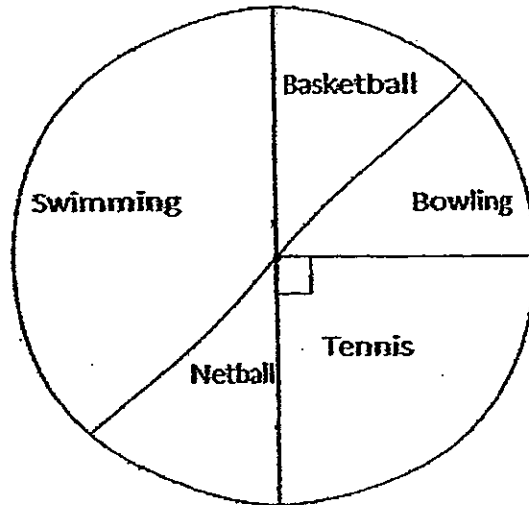
- 27 The figure below is made up of a regular hexagon, in which $AB = BC = CD = DE = EF = FA$, and an equilateral triangle BCG . What is the sum of $\angle m$ and $\angle n$?



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

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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.

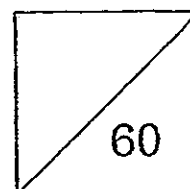
Write your answers in this booklet.

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

Name: _____ ()

Class: Primary 6. _____

Date: 5 March 2013



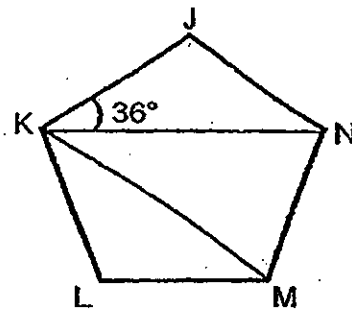
This booklet consists of 15 printed pages including this page.

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 $\angle JNM$.



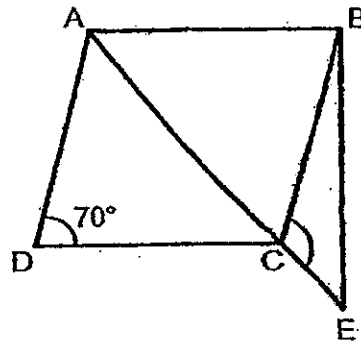
Ans: _____°

(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: _____

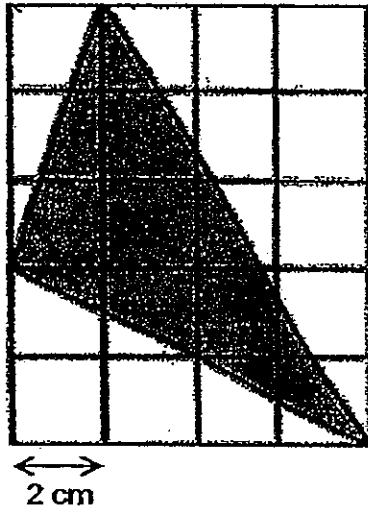
- 4 ABCD is a rhombus and ABE is a right-angled triangle. $\angle ADC = 70^\circ$.
Find $\angle BCE$.



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?

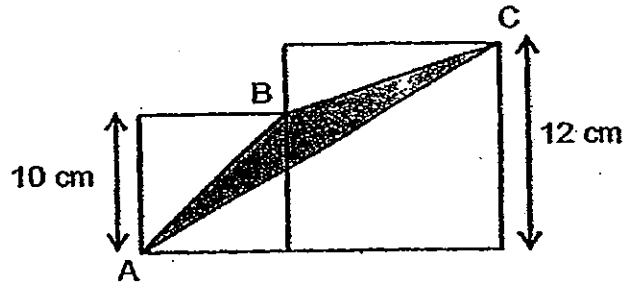
Ans: _____ [3]

- 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.

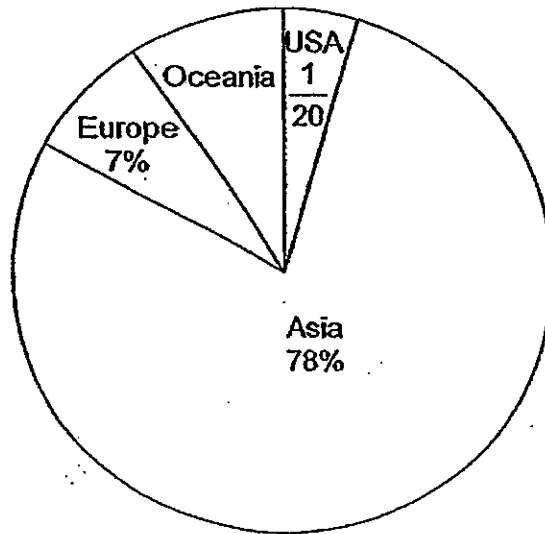


Ans: _____ [3]

(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]

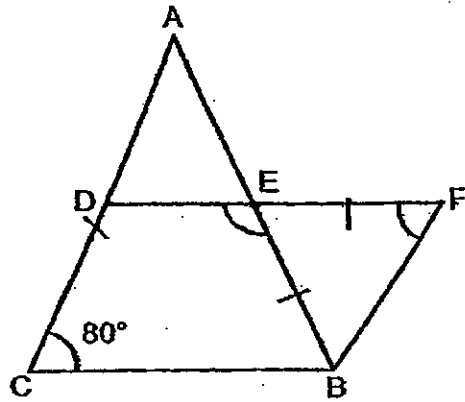
(Go on to the next page)

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)

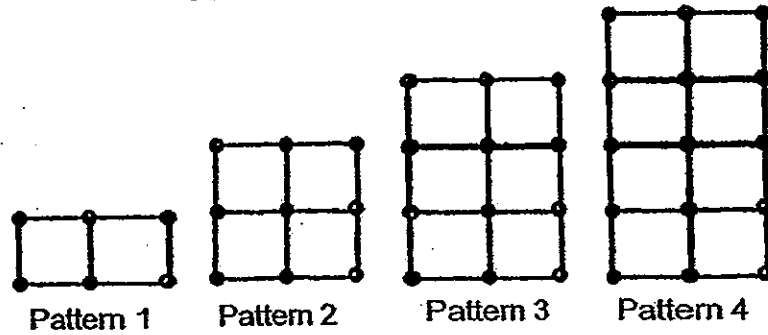
- 17 Shop A and Shop B had a total of 10 400 packets of flour at first. Both shops sold $\frac{3}{5}$ of their packets of flour. Shop B then had 520 more packets of flour than Shop A.
- (a) How many packets of flour did Shop B have at first?
- (b) Shop B sold each packet of flour at \$2.25. How much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

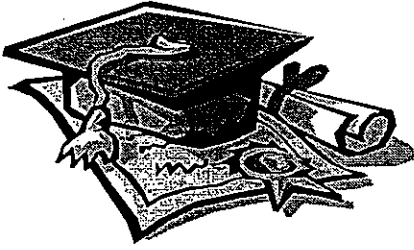


	Number of lines	Number of dots
Pattern 1	7	6
Pattern 2	12	9
Pattern 3	17	12
Pattern 4	22	15
.	.	.
.	.	.
Pattern 6	(a) _____	

- (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

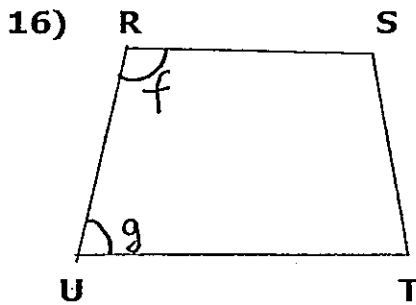
EXAM PAPER 2013

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.**

