

# 2017 SEMESTRAL ASSESSMENT 1

## MATHEMATICS PAPER 1

Name : \_\_\_\_\_ (     )

Class : Primary 5 / \_\_\_\_\_

Date : 4 May 2017

### BOOKLET A

15 Questions

20 Marks

Duration of Paper 1 (Booklets A & B): 1 hour

**Note:**

1. Do not open this Booklet until you are told to do so.
2. Read carefully the instructions given at the beginning of each part of the Booklet.
3. Do not waste time. If a question is difficult for you, go on to the next one.
4. Check your answers thoroughly and make sure you attempt every question.
5. In this booklet, you should have the following:
  - (a) Page 1 to Page 5
  - (b) Questions 1 to 15
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 (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

---

1 How many hundreds are there in 10 million?

- (1) 100
- (2) 1 000
- (3) 10 000
- (4) 100 000

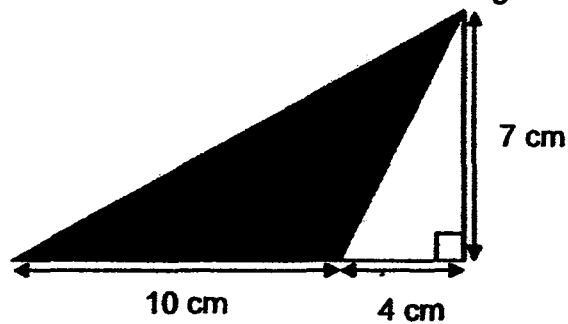
2 Find the value of  $60 - 20 \div 2 + 2 \times 5$ .

- (1) 30
- (2) 35
- (3) 59
- (4) 60

3 The difference between the values of the digit '2' and the digit '9' in 42 391 is \_\_\_\_\_.

- (1) 1 910
- (2) 1 991
- (3) 2 009
- (4) 2 090

4 What is the area of the shaded triangle?



- (1)  $14 \text{ cm}^2$
- (2)  $35 \text{ cm}^2$
- (3)  $49 \text{ cm}^2$
- (4)  $70 \text{ cm}^2$

5 Nora had \$36. She spent \$24 on food. What fraction of her money had she left?

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

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

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

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

6 Jack had 20 berries, 16 oranges and 18 apples. What was the ratio of the number of berries to apples Jack had?

(1) 10 : 9

(2) 10 : 8

(3) 8 : 9

(4) 8 : 10

7 ☀ is an odd number. ☾ is an even number.  
Which one of the following gives an odd number?

(1) ☾ + ☀ + 2

(2) ☾ + ☾ + 2

(3) ☾ × ☀ × 2

(4) ☀ × ☀ × 2

8  $33 \times 17$  has the same value as  $17 + 17 + \square + 17$ .

What is the missing number in the box?

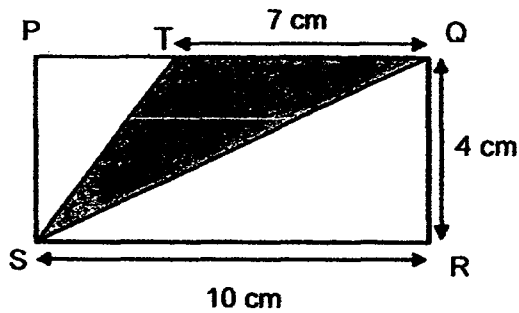
(1) 510

(2) 527

(3) 544

(4) 561

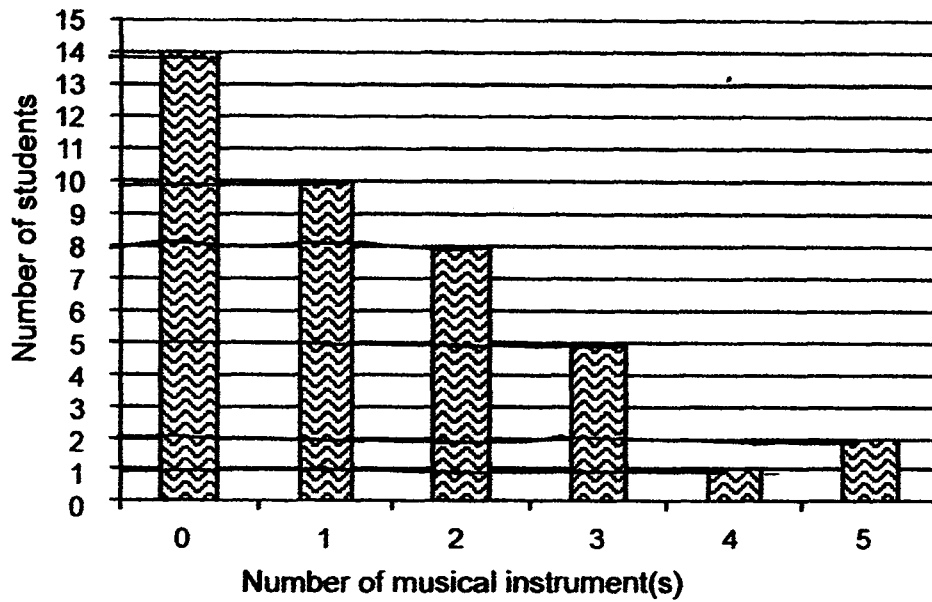
- 9 PQRS is a rectangle. Find the total area of the unshaded triangles, PST and QRS.



- (1)  $14 \text{ cm}^2$   
 (2)  $20 \text{ cm}^2$   
 (3)  $26 \text{ cm}^2$   
 (4)  $36 \text{ cm}^2$
- 10 Mr Chan bought 28 boxes of pencils and got 20 pencils free. Each box contained 36 pencils. Then he sold all these pencils to his friend at 10 for \$4. Which of the following expressions should he use to find how much he collected from selling all the pencils?
- (1)  $(28 \times 36 + 20) \div 10 \times \$4$   
 (2)  $(28 \times 36) + (20 \div 10) \times \$4$   
 (3)  $(28 \times 36) + 20 \div (10 \times \$4)$   
 (4)  $(28 \times 36) + 20 \div 10 \times \$4$
- 11 0.05 expressed as a fraction in its simplest form is \_\_\_\_\_.

- (1)  $\frac{1}{2000}$   
 (2)  $\frac{1}{200}$   
 (3)  $\frac{1}{20}$   
 (4)  $\frac{1}{2}$

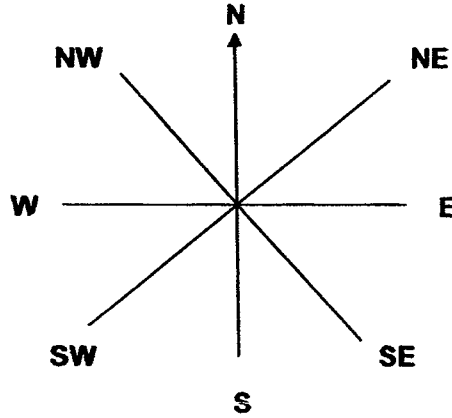
- 12 All the students from a music enrichment class were asked the number of musical instruments they had. The bar graph below shows the results. What is the number of students who have more than 1 musical instrument?



- (1) 10  
(2) 14  
(3) 16  
(4) 26
- 13 Tingting took 35 minutes to complete her project. Ben took 15 more minutes than Tingting to complete his project. If Ben finished his project at 3.30 p.m., at what time did he start doing his project?
- (1) 2.20 p.m.  
(2) 2.40 p.m.  
(3) 2.55 p.m.  
(4) 4.20 p.m.

- 14 If Sarah makes a  $270^\circ$  anti-clockwise turn, she will face South-West. Where will Sarah be facing if she has turned  $225^\circ$  clockwise instead?

- (1) North
- (2) South
- (3) East
- (4) West



15  $\frac{2}{3} \times 15 = \boxed{\phantom{000}} \times 30.$

What is the missing fraction in the box?

- (1)  $\frac{1}{10}$
- (2)  $\frac{1}{6}$
- (3)  $\frac{1}{5}$
- (4)  $\frac{1}{3}$





# 2017 SEMESTRAL ASSESSMENT 1

## MATHEMATICS PAPER 1

Name : \_\_\_\_\_ (     )

Class : Primary 5 / \_\_\_\_\_

Date : 4 May 2017

### BOOKLET B

15 Questions  
25 Marks

In this booklet, you should have the following:

- (a) Page 6 to Page 11
- (b) Questions 16 to 30

### MARKS

	OBTAINED	POSSIBLE
BOOKLET A		20
BOOKLET B		25
TOTAL		45

Parent's Signature : \_\_\_\_\_

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

---

16  $8\,620 \times \square = 86.2 \times 1\,000$

What is the missing number in the box?

Ans: \_\_\_\_\_

---

17 What is the remainder in  $2\,470 \div 70$ ?

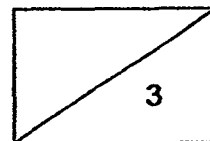
Ans: \_\_\_\_\_

---

18 Round off 1 234 670 to the nearest hundred.

Ans: \_\_\_\_\_

---



- 19 The sum of two numbers is 36. The greater number is 3 times the smaller number. What is the smaller number?

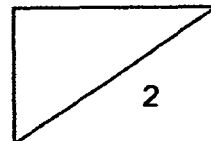
Ans: \_\_\_\_\_

---

- 20 Helen is 11 years old now. Her sister, Lynn, is 4 years younger. Find the ratio of Helen's age to Lynn's age in 6 years time.

Ans: \_\_\_\_\_

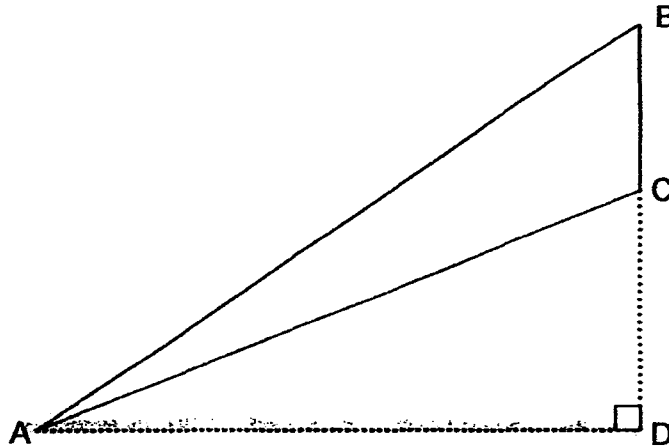
---



Questions 21 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.

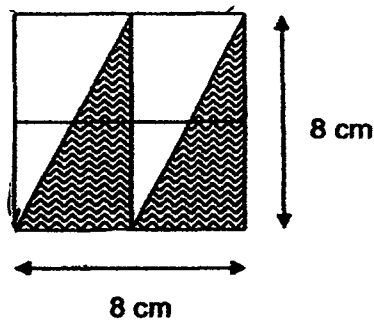
(20 marks)

21 Name the height of Triangle ABC if BC is its base.

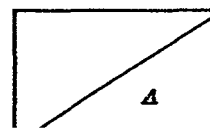


Ans: \_\_\_\_\_

22 The figure is made up of 4 identical squares. Find the total area of the two shaded triangles.



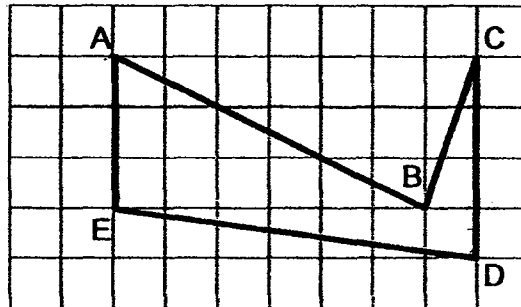
Ans: \_\_\_\_\_  $\text{cm}^2$



- 23 Kym bought 6 m of cloth. She used  $1\frac{3}{4}$  m of cloth to make a blouse and 2 m of cloth to make a pair of shorts. How much cloth did she have left?

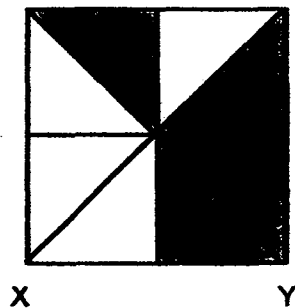
Ans: \_\_\_\_\_ m

- 24 How many pair(s) of parallel lines are there in the figure below?



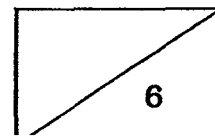
Ans: \_\_\_\_\_

- 25 The figure below shows a square divided into 8 equal parts. The total area of the shaded parts is  $50 \text{ cm}^2$ . Find the length of XY.

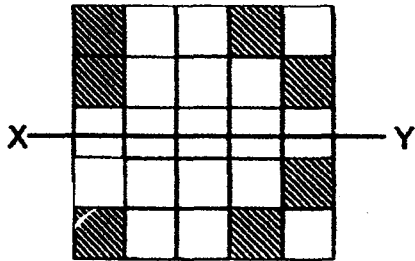


X Y

Ans: \_\_\_\_\_ cm



26 Shade 1 box so that XY is the line of symmetry in the figure below.



---

27 Express 99 hundreds, 113 tenths and 28 hundredths as a decimal.

Ans: \_\_\_\_\_

---

28 Ahmad has twelve 20-cent and 5-cent coins. There are twice as many 5-cent coins as 20-cent coins. What is the total value of his coins?

Ans: \$ \_\_\_\_\_



- 29 In an auditorium, each row had the same number of seats. James sat on one of the seats in the auditorium. There were 4 seats on his left and 15 seats on his right. There were 10 rows behind him and 11 rows in front of him. How many seats were there in the auditorium altogether?

Ans: \_\_\_\_\_

---

- 30 Study the sequence below:

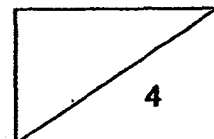
10, 9, 7, 3, 10, 9, 7, 3, 10, 9, 7, 3, ....

Find the sum of the first 64 numbers in the sequence.

Ans: \_\_\_\_\_

---

END OF PAPER



**2017 SEMESTRAL ASSESSMENT 1**  
**MATHEMATICS**  
**PAPER 2**

Name : \_\_\_\_\_ (     )

Class : Primary 5 / \_\_\_\_\_

Date : 4 May 2017

**17 Questions**

**55 Marks**

**Duration of Paper 2: 1 hour 30 minutes**

**Note:**

- 1. Do not open this Booklet until you are told to do so.**
- 2. Read carefully the instructions given at the beginning of each part of the Booklet.**
- 3. Do not waste time. If a question is difficult for you, go on to the next one.**
- 4. Check your answers thoroughly and make sure you attempt every question.**
- 5. In this paper, you should have the following:**
  - (a) Page 1 to Page 11**
  - (b) Questions 1 to 17**
- 6. You are allowed to use a calculator.**



Questions 1 to 5 carry 2 marks each. Show your workings 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)

---

- 1 Charlie's grandmother has  $\frac{5}{6}$  as many music albums as his grandfather. Charlie took  $\frac{1}{6}$  of his grandfather's music albums. If Charlie has 120 fewer music albums than his grandmother, find the number of music albums his grandfather has at first.

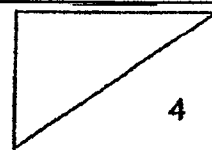
Ans: \_\_\_\_\_


---










- 2 The ratio of Penny's age to Queenie's age is 3 : 4. The ratio of Queenie's age to Ronnie's age is 2 : 3. What is the ratio of Penny's age to Queenie's age to Ronnie's age?

Ans: \_\_\_\_\_

---

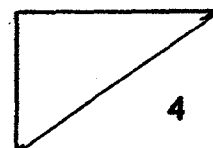
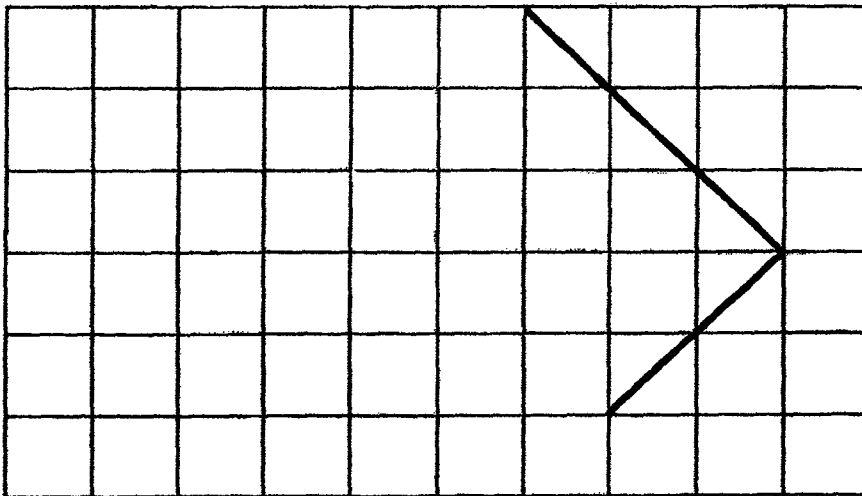


3 Each symbol in the figure below represents a number. The total value in each row and column is shown. Find the value of the .

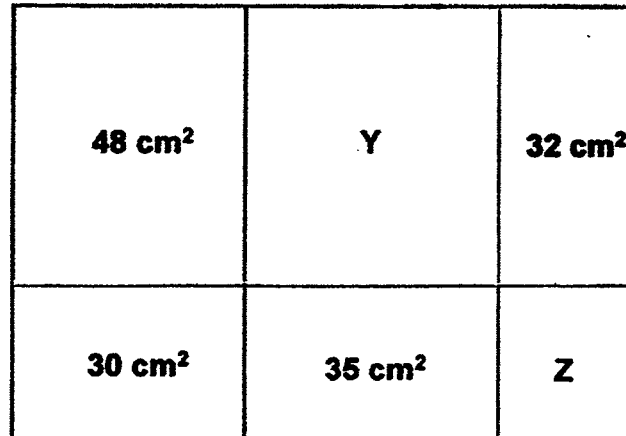
			150
			240
			100
150	200	140	

Ans: \_\_\_\_\_

4 Draw a rectangle from the given lines.

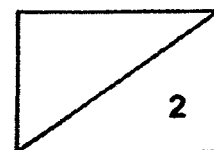


- 5 The figure below is not drawn to scale. It shows a rectangular piece of cardboard divided into 6 parts. Each part has a different area. Find the total area of Y and Z given the lengths and breadths of all the parts are whole numbers.



Ans: \_\_\_\_\_ cm<sup>2</sup>

---



For Questions 6 to 17, show your workings clearly in the space below 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. (45 marks)

---

- 6 Study the number pattern below carefully.  
What number does P represent?

1		2
	10	
3		4

3		4
	38	
5		6

12		13
	P	
14		15

Ans: \_\_\_\_\_ [3]

---

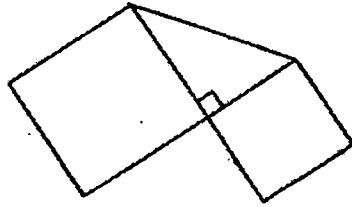
- 7 Danny and Andy had a total of 48 marbles. After their teacher had given Andy another 6 marbles, Danny had five times as many marbles as Andy. How many marbles had Andy at first?

Ans: \_\_\_\_\_ [3]

---



- 8 The figure below is formed by two squares and a triangle. The areas of the two squares are  $144 \text{ cm}^2$  and  $81 \text{ cm}^2$ . What is the area of the triangle?



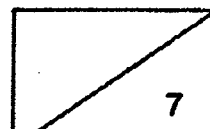
Ans: \_\_\_\_\_ [3]

---

- 9  $\frac{5}{8}$  of a string was painted yellow and  $\frac{2}{5}$  of the remainder was painted blue. 51 cm of the string was painted blue. What was the length of the string?

Ans: \_\_\_\_\_ [4]

---



- 10 Ramy had \$100. The ratio of the amount of money Ramy had to the amount of money Sue had was 5 : 8. Sue had \$23 more than Tom. What was the ratio of the amount of money Sue had to the amount of money Tom had?

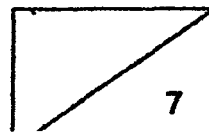
Ans: \_\_\_\_\_ [3]

---

- 11 After Mr Tham had donated  $\frac{1}{6}$  of his money, he divided the remaining amount of money among his three daughters in the ratio 3 : 3 : 4. The daughter with the biggest share had \$20 880. What is the amount of money Mr Tham had at first?

Ans: \_\_\_\_\_ [4]

---

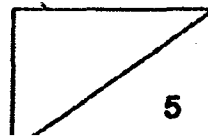


- 12 The ratio of the number of motorcycles sold to the number of cars sold in Mr Johnson's shop was 5 : 9. Each motorcycle has 2 wheels and each car has 4 wheels. If the total number of wheels of all the vehicles sold was 460, what was the total number of vehicles sold in Mr Johnson's shop?

Ans: \_\_\_\_\_ [5]

---

7



- 13** A packet of ice-cream sticks was shared equally among 40 children. When the same number of ice-cream sticks was shared equally among 32 children instead, each child would receive 3 more. How many ice-cream sticks were there in the packet?

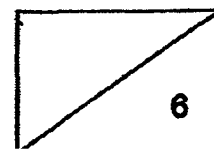
Ans: \_\_\_\_\_ [3]

---

- 14**  $\frac{1}{4}$  of the number of Eugene's coins is equal to  $\frac{2}{5}$  of the number of Minho's coins. If Minho has 33 coins fewer than Eugene, how many coins do they have altogether?

Ans: \_\_\_\_\_ [3]

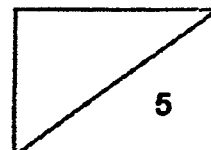
---



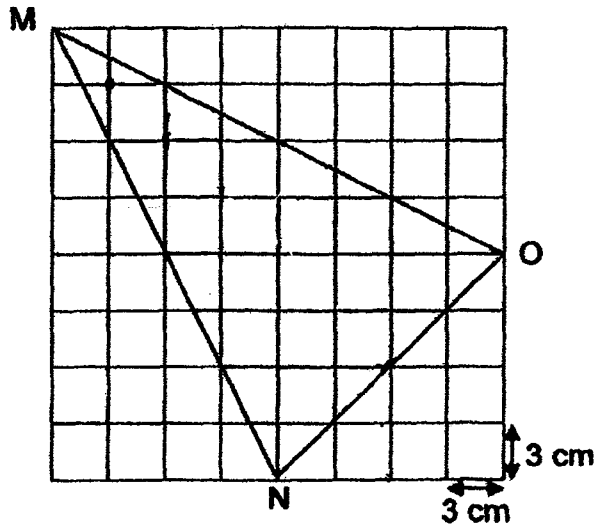


- 15 Mrs Sim and Nancy had some buttons each. If Mrs Sim gave Nancy 24 buttons, they both would have an equal number of buttons. If Nancy gave Mrs Sim 24 buttons, Mrs Sim would have 3 times as many buttons as Nancy. How many buttons did Mrs Sim have?

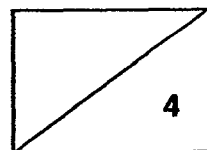
Ans: \_\_\_\_\_ [5]



16 Study the diagram below. Find the area of Triangle MNO.



Ans: \_\_\_\_\_ [4]



17 900 people of Chinese and Malay ethnic background were at a party to celebrate Family Day.  $\frac{2}{5}$  of the men and  $\frac{1}{2}$  of the women were Malay adults.

There was an equal number of Chinese male adults and Chinese female adults. 130 children were also at the party.

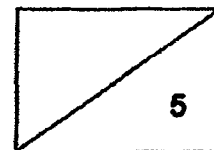
- (a) How many Chinese female adults were at the party?  
(b) What fraction of the people attending the party were Malay adults?

Ans: (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [2]

---

END OF PAPER

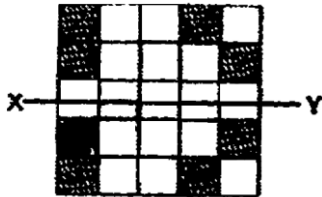




School: Red Swastika  
 Level: P5  
 Subject: Maths  
 Term: SA1  
 Year: 2017

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

- Q16) 10                      Q17) 20                      Q18) 1 234 700                      Q19) 9                      Q20) 17 : 13  
 Q21) AD                      Q22) 32 cm<sup>2</sup>                      Q23) 2 $\frac{1}{4}$  m                      Q24) 1                      Q25) 10 cm  
 Q26)                      Q27) 9911.58                      Q28) \$1.20                      Q29) 440                      Q30) 464



**Paper 2**

Q1)

	GM	:	GF
At first	5	:	6

GM	:	C	Diff
5	:	1	4

4 u = 120  
 1 u = 30  
 6 u = 180

Q2)

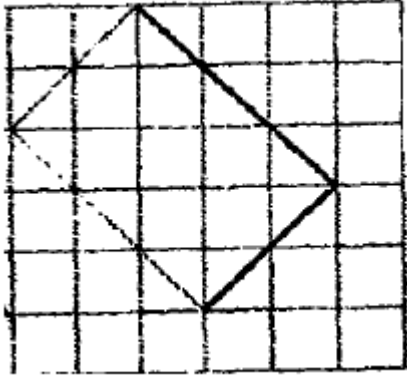
P	:	Q
3	:	4

Q	:	R
2 x 2	:	3 x 2
4	:	6

P : Q : R  
 3 : 4 : 6

Q3)  $3 \circ = 240$   
 $1 \circ = 80$   
 $200 - 160 = 40$  (1 ♥)

Q4)



Q5)

Area A	Area Y	Area B	8
6	7	4	
Area C	Area D	Area Z	5

$48 = 8 \times 6$  (Area A)

$32 = 8 \times 4$  (Area B)

$30 = 6 \times 5$  (Area C)

$35 = 7 \times 5$  (Area D)

Area of Y =  $8 \times 7 = 56 \text{ cm}^2$

Area of Z =  $5 \times 4 = 20 \text{ cm}^2$

Q6)  $12 \times 15 = 180$   
 $14 \times 13 = 182$   
 $180 + 182 = 362$

Q7)  $6 \times 6 = 36$   
 $48 + 6 = 54$   
 $54 - 36 = 18$   
 $18 \div 6 = 3$

Q8) Length of big square = 12 cm  
Length of small square = 9 cm  
Area of triangle =  $\frac{1}{2} \times 9 \times 12 = 54 \text{ cm}^2$

Q9)  $1 - \frac{5}{8} = \frac{3}{8}$

$$\frac{2}{5} \times \frac{3}{8} = \frac{3}{20}$$

$$3 u = 51$$

$$1 u = 17$$

$$17 \times 20 = 340 \text{ cm}$$

Q10)

R	:	S
5	:	8

$$5 u = 100$$

$$1 u = 20$$

$$8 u = 160$$

$$160 - 23 = 137$$

S	:	T
160	:	137

Q11)  $4 u = \$20\,880$

$$3 + 3 + 4 = 10$$

$$10 u = \$52\,200$$

$$5 p = \$52\,200$$

$$6 p = \$62\,640$$

Q12)

M	:	C	Total
5	:	9	14

$$5 u (2) + 9u (4) = 460 \text{ (Total number of wheels)}$$

$$46 u = 460$$

$$14u = 140$$

Q13)  $32 \times 3 = 96$  (number of ice-cream shared among 8 students)

$$96 \div 8 = 12$$

$$12 \times 40 = 480$$

Q14)  $\frac{1}{4}$  of Eugene =  $\frac{2}{5}$  of Minho

$$\frac{2}{8} \text{ of Eugene} = \frac{2}{5} \text{ of Minho}$$

$$8 - 5 = 3$$

$$3 u = 33$$

$$1 u = 11$$

$$8 + 5 = 13$$

$$13 \times 11 = 143$$

Q15) If Mrs Sim gave Nancy 24 buttons

Mr Sim	:	Nancy	Total
1u	:	1u	2u

If Nancy gave Mrs Sim 24 buttons

Mr Sim	:	Nancy	Total
3p	:	1p	4p

$$1p + 24 = 1u - 24$$

$$1p = 1u - 48$$

$$4p = 4u - 192 \quad \text{--- (x4)}$$

$$4u - 192 = 2u \quad \text{--- (4p = 2u)}$$

$$2u = 192$$

$$1u = 96$$

$$96 + 24 = 120 \text{ (Number of buttons Mrs Sim had at first)}$$

Q16)  $6 \times 3 = 18$

$$4 \times 3 = 12$$

$$\frac{1}{2} \times 18 \times 12 = 108$$

$$\text{Area of triangle MNO} = 108 \times 2 = 216 \text{ cm}^2$$

Q17)

Men		
Chinese	:	Malay
3	:	2

Women		
Chinese	:	Malay
3	:	3

a)  $5 + 6 = 11$

$$11 u = 900 - 130 = 770$$

$$1 u = 70$$

$$3 u = 210 \text{ (Chinese women)}$$

b)  $5 u = 350$

$$\frac{350}{900} = \frac{7}{18}$$

End