

# METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



## END-OF-YEAR EXAMINATION 2015 PRIMARY 5 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.

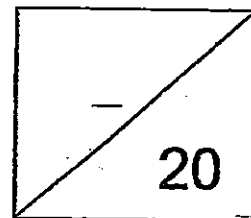
Shade your answers in the Optical Answer Sheet (OAS)  
provided.

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

Name: \_\_\_\_\_ ( )

Class: Primary 5. \_\_\_\_\_

Date: 28 October 2015



This booklet consists of 8 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 correct oval (1, 2, 3 or 4) on the Optical  
Answer Sheet. (20 marks)

---

1. Round off 650 999 to the nearest thousand.

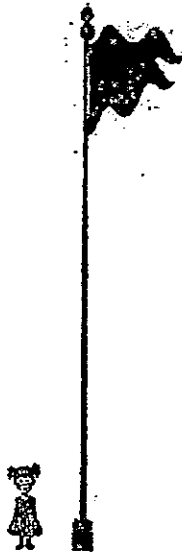
(1) 650 000

(2) 651 000 —

(3) 660 000

(4) 700 000

2. The height of the flag pole shown below is about \_\_\_\_\_.



(1) 6 cm

(2) 60 cm —

(3) 600 cm

(4) 6 000 cm  
—

3. What is the value of 9 hundreds, 50 tenths and 7 thousandths?

- (1) 900.507
- (2) 905.007
- (3) 905.570
- (4) 950.070

4. Express  $1\frac{3}{4}$  hour in minutes.

- (1) 90 min
- (2) 105 min
- (3) 134 min
- (4) 145 min

5. Which one of the following has the same value as  $\frac{2}{3} \div 8$ ?

- (1)  $\frac{2}{3} \times \frac{1}{8}$
- (2)  $\frac{2}{3} \times 8$
- (3)  $\frac{3}{2} \times \frac{1}{8}$
- (4)  $\frac{3}{2} \times 8$

6.  $\frac{6}{10}$  is the same as \_\_\_\_\_.

(1) 0.06%

(2) 0.6%

(3) 6%

(4) 60%

7. Find the value of  $\frac{3}{4} + 1\frac{2}{3}$ .

Give your answer as a mixed number in the simplest form.

(1)  $1\frac{5}{12}$

(2)  $1\frac{7}{12}$

(3)  $2\frac{5}{12}$

(4)  $2\frac{7}{12}$

8. Express 0.34 as a fraction in the simplest form.

(1)  $\frac{17}{50}$

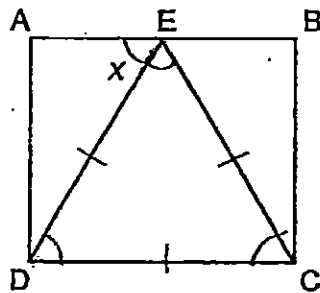
(2)  $\frac{34}{100}$

(3)  $\frac{17}{100}$

(4)  $\frac{34}{1000}$

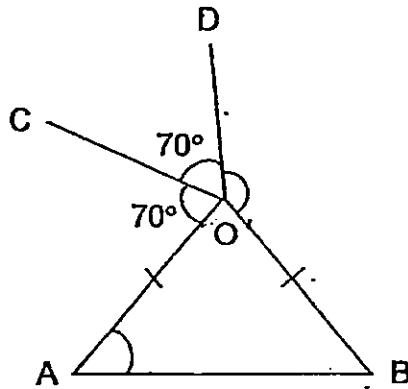
9. Caitlyn played 14 tennis matches. Sara played 6 fewer matches than Caitlyn. Find the ratio of the number of matches Caitlyn played to the total number of matches both girls played.
- (1) 7 : 3.
  - (2) 7 : 4
  - (3) 7 : 10
  - (4) 7 : 11

10. In the figure below, ABCD is a rectangle and CED is an equilateral triangle. Find  $\angle x$ .



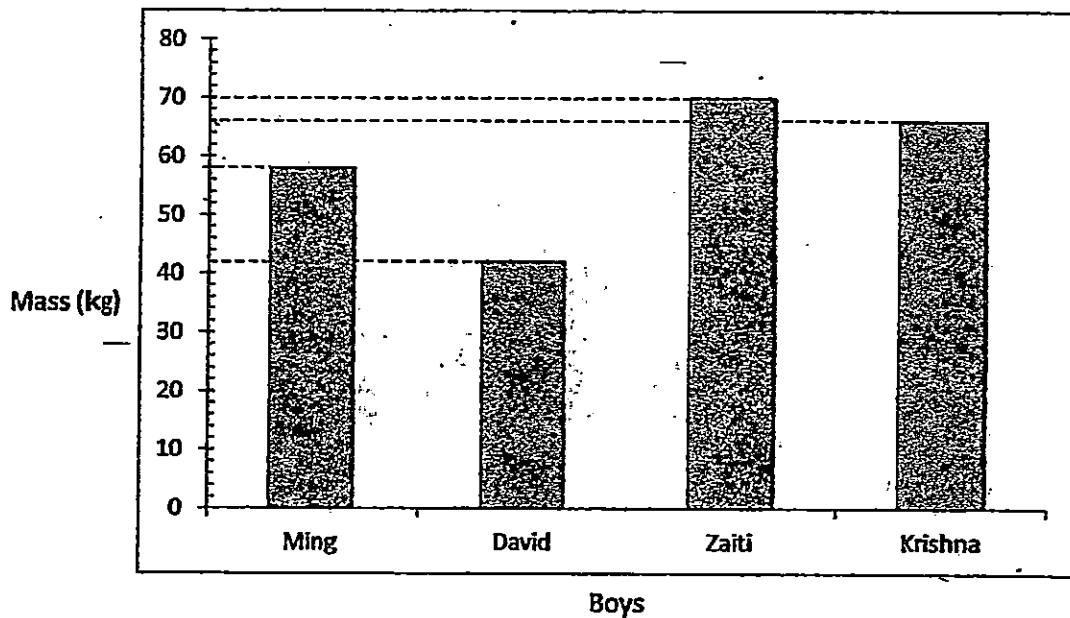
- (1)  $30^\circ$
- (2)  $45^\circ$
- (3)  $60^\circ$
- (4)  $90^\circ$

11. In the figure below,  $OAB$  is an isosceles triangle.  $\angle DOB$  is twice the size of  $\angle COD$  and  $\angle COD = \angle COA = 70^\circ$ . Find  $\angle OAB$ .



- (1)  $35^\circ$   
(2)  $50^\circ$   
(3)  $70^\circ$   
(4)  $80^\circ$
12. May and Jane shared \$474. May received twice as much money as Jane. How much money did May receive?
- (1) \$118.50  
(2) \$158  
(3) \$237  
(4) \$316

13. The bar graph below shows the mass of 4 boys.



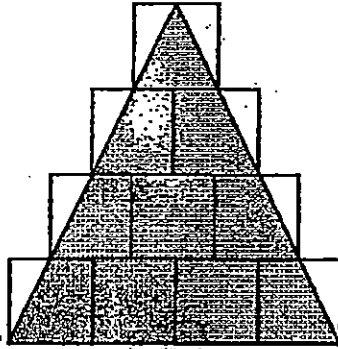
What is the average mass of the 4 boys?

- (1) 57 kg
- (2) 59 kg
- (3) 228 kg
- (4) 236 kg

14. The ratio of the number of men to the number of women was 4 : 3. The ratio of the number of women to the number of children was 5 : 2. What was the ratio of the number of men to the number of women to the number of children?

- (1) 4 : 3 : 2
- (2) 4 : 8 : 2
- (3) 12 : 15 : 10
- (4) 20 : 15 : 6

15. The figure below is made up of ten 4-cm squares. Find the area of the shaded part.



- (1)  $40 \text{ cm}^2$   
(2)  $128 \text{ cm}^2$   
(3)  $160 \text{ cm}^2$   
(4)  $256 \text{ cm}^2$



# METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



## END-OF-YEAR EXAMINATION 2015 PRIMARY 5 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 5. \_\_\_\_\_

Date: 28 October 2015

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

Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
<b>TOTAL</b>	<b>/ 100</b>

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)

Do not write in this space

16. What is the greatest odd number that can be formed using the digits 2, 8, 0, 7, 3?

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

17. Find the value of  $\frac{4}{9} \times \frac{3}{10}$ . Give your answer in the simplest form.

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

18.  $4.08 \times 20 = 1.08 \times 20 + \square \times 20$ .

What is the missing number in the box?

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

19. Arrange the following from the smallest to the largest.

0.25, 0.4,  $\frac{4}{11}$ ,  $\frac{1}{10}$

Do not write  
in this space

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

20. Express 2.09 as a percentage.

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

21. At a furniture store, the usual price of a bed is \$880. During a sale, Mrs Lim received a 15% discount. How much was the discount?

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

Use the information below to answer questions 22 and 23.

The table shows the number of local and foreign visitors who visited the Singapore Zoo over a weekend.

Do not write  
in this space

Number of visitors				
Singaporean	Malaysian	Indonesian	Korean	Japanese
1250	290	185	95	180

22. What is the ratio of the number of local visitors to the number of foreign visitors? Give your answer in the simplest form.

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

23. What percentage of the visitors were Japanese?

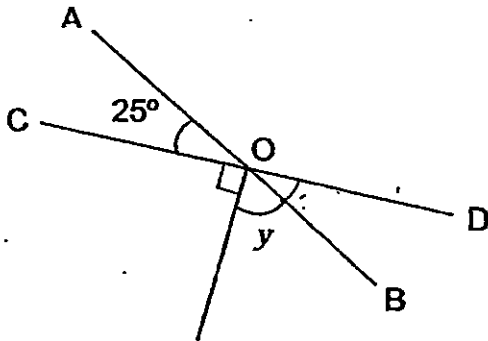
Ans : \_\_\_\_\_ %

24. There were 120 children in a camp. 84 of them were boys. What percentage of the children were girls?

Do not write  
in this space

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

25. In the figure below, AB and CD are straight lines.  $\angle AOC = 25^\circ$ . Find  $\angle y$ .

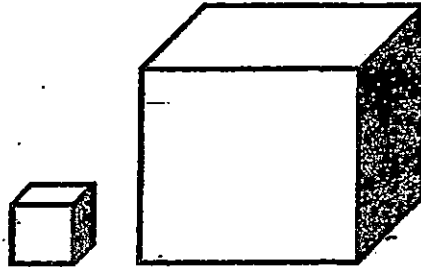


Ans : \_\_\_\_\_ °

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)

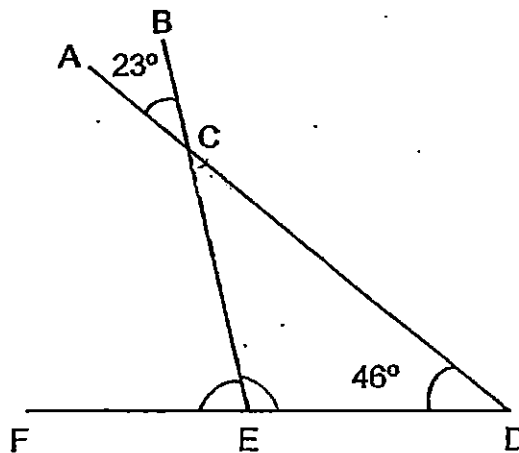
Do not write in this space

26. Hakim has two cubes made of the same substance. The small cube is a unit cube with mass 14 g. The base of the large cube is three times that of the small cube. What is the mass of the large cube?



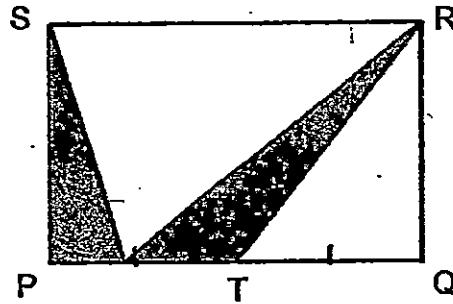
Ans: \_\_\_\_\_ g

27. In the figure below, AD, BE and FD are straight lines.  $\angle ACB = 23^\circ$  and  $\angle CDE = 46^\circ$ . Find  $\angle CEF$ .



Ans: \_\_\_\_\_ °

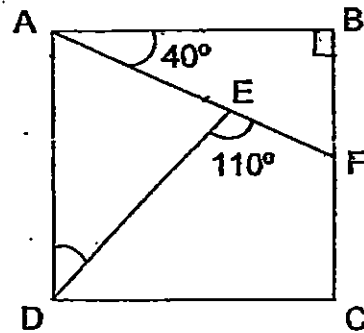
28. In the figure, PQRS is a rectangle with  $PT = TQ$ . What fraction of the figure is shaded?



Do not write in this space

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

29. In the figure below, ABCD is a square. AEF is a straight line.  $\angle DEF = 110^\circ$  and  $\angle BAE = 40^\circ$ . Find  $\angle ADE$ .



Ans : \_\_\_\_\_ °

30. The ratio of the number of oranges to the number of lemons in a basket was 3 : 5. After 48 oranges were sold, the ratio of the number of oranges to the number of lemons became 1 : 2. How many lemons were there in the basket at first?

Do not write  
in this space

Ans :

End of Paper



# METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



## END-OF-YEAR EXAMINATION 2015 PRIMARY 5 MATHEMATICS

### PAPER 2

Duration: 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.

Write your answers in this booklet.

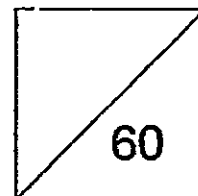
The use of an approved calculator is expected, where appropriate.

Name: \_\_\_\_\_ ( )

Class: Primary 5. \_\_\_\_\_

Date: 28 October 2015

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



This booklet consists of 12 printed pages including this 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 in the units stated. (10 marks)

Do not write in this space

1. The ratio of the number of stickers Sandy has to the number of stickers Tina has is 5 : 4. Both girls have a total of 117 stickers. How many stickers does Tina have?

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

2. May bought  $\frac{3}{4}$  kg of sugar. She used  $\frac{1}{2}$  of it to bake some muffins. How much sugar did she use to bake muffins? Give your answer in grams.

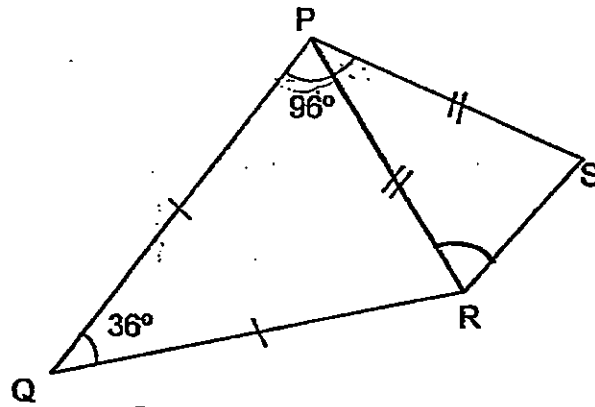
Ans : \_\_\_\_\_ g

3. Paul had \$630. He spent \$70 on books and  $\frac{2}{7}$  of the remainder on calculators. How much money had he left?

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

4. In the figure below, PQR and PRS are isosceles triangles.  
 $\angle PQR = 36^\circ$  and  $\angle QPS = 96^\circ$ . Find  $\angle PRS$ .

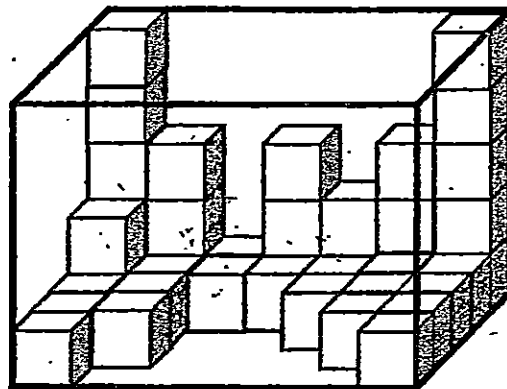
Do not write  
 in this space



Ans: \_\_\_\_\_ °



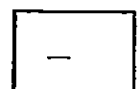
5. Dinesh put some 1-cm cubes into a rectangular box as shown below.



- (a) What is the volume of the rectangular box?  
 (b) How many more such cubes are needed to fill the box completely?

Ans: (a) \_\_\_\_\_  $\text{cm}^3$  [1]

(b) \_\_\_\_\_ [1]



For questions 6 to 18, show your working clearly and write your answers in the space 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 table shows the T-shirt sizes of class 6A, 6B and 6C. The average number of pupils in the 3 classes is 38.

Size of T-shirt	Class 6A	Class 6B	Class 6C
S	9	12	0
M	21	19	24
L	8	?	13

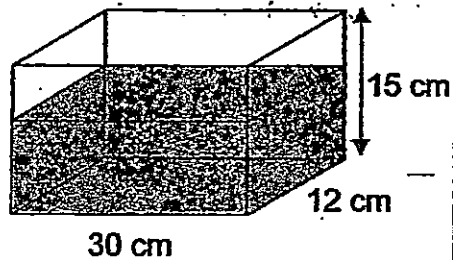
- (a) How many pupils in Class 6B ordered T-shirt Size L?  
(b) What is the average number of pupils who ordered size S in the 3 classes?

Ans: (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [1]



7. A rectangular tank measures 30 cm by 12 cm by 15 cm is filled with water from a tap. The tank is  $\frac{3}{5}$  - filled with water after 3 minutes. Find the volume of the water that flowed from the tap per minute. Give your answer in litres and millilitres.



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

Do not write  
in this space

8. Mark bought some blue, red and green marbles. He bought 72 blue marbles. The ratio of the number of red marbles to the number of blue marbles is 5 : 6. The number of red marbles is twice that of the number of green marbles. How many green marbles did Mark have?

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

9. Mae, Wei Ling and Siti bought a present for \$45. In addition, they had to pay 7% GST.

(a) Find the amount of GST paid.

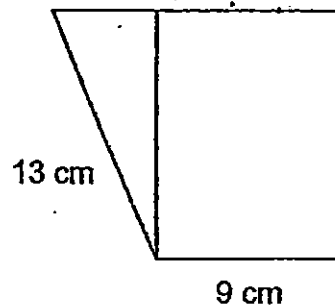
(b) How much did each person pay if the cost of present was shared equally among the 3 girls?

Do not write  
in this space

Ans : (a) \_\_\_\_\_ [1]

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

10. The figure is made up of a rectangle and a triangle. The area of the rectangle is  $108 \text{ cm}^2$ . The perimeter of the figure is 48 cm. Find the area of the figure.



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

11. There were 72 children.  $\frac{7}{12}$  of them were boys. The ratio of the total number of sweets the girls had to the total number of sweets the boys had was 1 : 2. There were a total of 756 sweets.

- (a) How many girls were there?  
(b) How many sweets did each boy have?

Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [3]

Do not write  
in this space

12. Some pupils were grouped into Group A, Group B and Group C. Group A had 36 more pupils than Group B. Group B and Group C had 114 pupils each. A number of pupils were transferred from Group A to Group B and Group C so that there was equal number of pupils in all 3 groups. What percentage of the members from Group A has transferred to Group B?

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

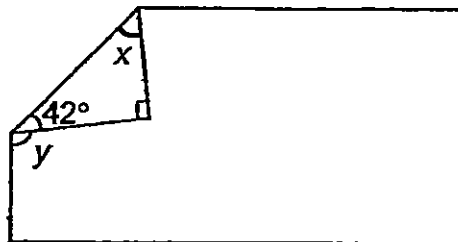
13. Yanti scored a total of 260.5 marks for English, Mathematics and Science. Her English marks were recorded incorrectly as 85. After her marks were amended, the average marks for the 3 subjects increased to 90.
- (a) What was the actual mark for English?
- (b) How many marks must she score for Chinese if she hopes to achieve an average mark of 92 for 4 subjects?

Do not write  
in this space

Ans: (a) \_\_\_\_\_ [2]

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

14. A rectangular piece of paper is folded as shown. Find
- (a)  $\angle x$
- (b)  $\angle y$



Ans: (a) \_\_\_\_\_ [2]

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



15. Study the pattern in the figure below. It shows the seating arrangement in a restaurant.

Do not write in this space

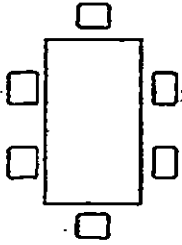


Figure 1

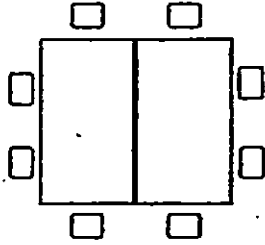


Figure 2

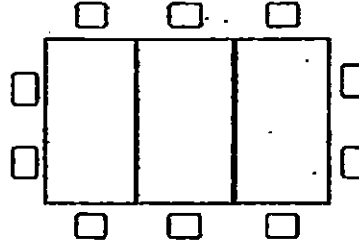


Figure 3

Figure Number	Number of tables	Number of seats
1	1	6
2	2	8
3	3	10
4	4	(a) _____

- (a) Find the number of seats needed for Figure 4.  
 (b) Find the number of seats needed for Figure 20.  
 (c) Each table measures 2 m by 1.2 m. Find the perimeter of Figure 12.

Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [1]

(c) \_\_\_\_\_ [2]



16. The ratio of Wei Ling's savings to her brother's savings is 7 : 3. After Wei Ling gave her brother \$234 of her savings, the ratio of Wei Ling's savings to her brother's saving is 2 : 3.

- (a) What was their total saving?
- (b) How much more money did her brother have than Wei Ling in the end?

Do not write  
in this space

\_\_\_\_\_ [3]

\_\_\_\_\_ [2]

17. Suresh bought some carrots and potatoes for \$154. Each bag of potatoes cost \$7 and each bag of carrots cost \$5 more. Suresh bought 3 more bags of potatoes than carrots.

Do not write  
in this space

- (a) How many bags of carrots did Suresh buy?
- (b) How much did Suresh pay for the potatoes?

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

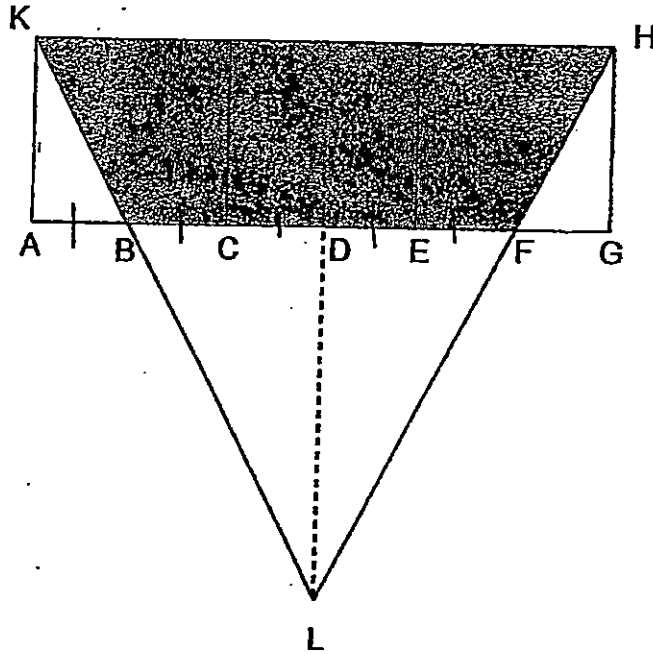
(b) \_\_\_\_\_ [2]



18. The figure below is made up of 3 identical squares and 1 triangle. LD is twice of AK.  $AB = BC = CD = DE = EF = FG$ . The perimeter of rectangle AGHK is 64 cm.

Do not write in this space

- (a) Find the area of the shaded part of the figure.  
 (b) Find area of Triangle LBF.



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

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



END.



**SCHOOL : METHODIST GIRLS' SCHOOL**  
**SUBJECT : MATHEMATICS**  
**TERM : SA2**

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

Q16. 87203

Q17.  $\frac{2}{15}$

Q18.  $3 \rightarrow 4.08 - 1.08 = 3$

Q19.  $\frac{1}{10}$ , 0.25,  $\frac{4}{11}$ , 0.4

Q20. 209%  $\rightarrow 2.09 \times 100\% = 209\%$

Q21. \$132  $\rightarrow 880 - 748 = 132$

Q22. 5:3

F 290 + 185 + 95 + 180 = 750

S: F

1250 : 750

125 : 75

25 : 15

5 : 3

Q23. 9%

Total 750 + 1250 = 2000

$\frac{180}{2000} \times 100\% = 9\%$

Q24. 30%  $\rightarrow G \rightarrow 120 - 84 = 36, \frac{36}{120} \times 100\% = 30\%$

Q25.  $65^\circ \rightarrow \angle AOD \rightarrow 180 - 25 = 155, \angle Y \rightarrow 155 - 90 = 65$

Q26.  $378g \rightarrow 1u \times 1u \times 1u = 14g3u \times 3u \times 3u = 27u^3, 27 \times 14 = 378$

Q27.  $69^\circ \rightarrow \angle CED \rightarrow 180 - 23 - 46 = 111, \angle CEF \rightarrow 180 - 111 = 69$

Q28.  $\frac{1}{4} \rightarrow \text{Rect} \rightarrow \frac{4}{4}$ , Shaded  $\rightarrow \frac{1}{4}$ , Unshaded  $\rightarrow \frac{4}{4} - \frac{3}{4} = \frac{1}{4}$

Q29.  $60^\circ$

ABF  $\rightarrow 180 - 90 - 40 = 50$

DEA  $\rightarrow 180 - 110 = 70$

DAE  $\rightarrow 90 - 40 = 50$

ADE  $\rightarrow 180 - 70 - 50 = 60$

$$L \rightarrow 10u$$
$$10u \rightarrow 48 \times 10 = 480$$

$$Q1. 52 \rightarrow 9u \rightarrow 117, 1u \rightarrow 117 \div 9 = 13, T \rightarrow 4u, 4u \rightarrow 13 \times 4 = 52$$

$$Q2. 375g$$
$$M \rightarrow \frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$$
$$\frac{3}{8}kg = 375g$$

$$Q3. \$400$$
$$R \rightarrow 630 - 70 = 560$$
$$C \rightarrow \frac{2}{7} \times 560 = 160$$
$$\text{Left} \rightarrow 560 - 160 = 400$$

$$Q4. 78^\circ$$
$$(180 - 36) \div 2 = 72$$
$$RPS \rightarrow 96 - 72 = 24$$
$$PRS \rightarrow (180 - 24) \div 2 = 78$$

$$Q5a. 175cm^3 \rightarrow 7cm \times 5cm \times 5cm = 175cm^3$$

$$Q5b. 134 \rightarrow \text{No. of cubes} \rightarrow 25 + 7 + 5 + 2 + 2 = 41, \text{ difference} \rightarrow 175 - 41 = 134$$

$$Q6a. 8$$
$$\text{Total} \rightarrow 38 \times 3 = 114$$
$$6A \rightarrow 9 + 21 + 8 = 38$$
$$6C \rightarrow 24 + 13 = 37$$
$$38 + 37 = 75$$
$$6B \rightarrow 114 - 75 = 39$$
$$L \rightarrow 39 - (12 + 19) = 8$$

$$Q6b. 7 \times 9 + 12 = 21, 21 \div 3 = 7$$

$$Q7. 1 \text{ litre } 80ml$$
$$\frac{2}{5} \times 30cm \times 12cm \times 15cm = 3240cm^3$$
$$3 \text{ minutes} \rightarrow 3240cm^3$$
$$1 \text{ minute} \rightarrow 3240cm^3 \div 3 = 1080cm^3$$
$$1080cm^3 = 1 \text{ litre } 80ml$$

$$Q8. 30$$
$$G:R:B$$
$$5:10:12$$
$$12u \rightarrow 72, 1u \rightarrow 72 \div 12 = 6, G10u \div 2u = 5u, 5u \times 6 = 30$$

$$Q9a. \$3.15$$
$$\frac{7}{100} \times 45 = 3.15$$

Q9b. \$16.05

$$\text{Total} \rightarrow 45 + 3.15 = 48.15$$

$$48.15 \div 3 = 16.05$$

Q10.  $138\text{cm}^2$

$$\angle \text{ of rect.} \rightarrow 108 \div 9 = 12$$

$$\text{Area of rect.} \rightarrow 9 \times 12 = 108$$

$$\text{Area of } \Delta = \frac{1}{2} \times 5 \times 12 = 30$$

$$\text{Total area } 108 + 30 = 138$$

Q11a. 30

$$G \rightarrow \frac{12}{12} - \frac{7}{12} = \frac{5}{12}$$

$$\frac{5}{12} \times 72 = 30$$

Q11b. 12

G : B

$$1:2 \text{ (3u)}$$

$$3u \rightarrow 756$$

$$1u \rightarrow 756 \div 3 = 252$$

$$B \rightarrow 2u$$

$$2u \rightarrow 252 \times 2 = 504$$

$$\text{No. B} \rightarrow \frac{7}{12} \times 72 = 42$$

$$504 \div 42 = 12$$

Q12. 8%

$$A \rightarrow 114 + 36 = 150$$

$$\frac{12}{150} \times 100\% = 8\%$$

Q13a. 94.5

$$90 \times 3 = 270$$

$$270 - 260.5 = 9.5$$

$$85 + 9.5 = 94.5$$

Q13b. 98

$$92 \times 4 = 368$$

$$368 - 270 = 98$$

$$\text{Q14a. } 48^\circ \rightarrow \angle X \ 180 - 90 - 42 = 48$$

$$\text{Q14b. } 96^\circ \rightarrow \angle Y \ 180 - 42 - 42 = 96$$

$$\text{Q15a. } 12 \rightarrow 4 + 8 = 12$$

Q15b. 44

$$\text{F5} \rightarrow 12 + 2 = 14, \text{ F6} \rightarrow 14 + 2 = 16, \text{ F7} \rightarrow 16 + 2 = 18, \text{ F8} \rightarrow 18 + 2 = 20, \text{ F9} \rightarrow 20 + 2 = 22,$$

$$\text{F10} \rightarrow 22 + 2 = 24, \text{ F11} \rightarrow 24 + 2 = 26, \text{ F12} \rightarrow 26 + 2 = 28, \text{ F13} \rightarrow 28 + 2 = 30, \text{ F14} \rightarrow$$

$$30 + 2 = 32, \text{ F15} \rightarrow 32 + 2 = 34, 2 \times 5 = 10, \text{ F20} \rightarrow 34 + 10 = 44$$

Q16a. \$780  
21u-6u=15u  
15u  $\rightarrow$  702+468=1170  
1u  $\rightarrow$  1170 $\div$ 15=78  
W  $\rightarrow$  78x7 = 546  
B  $\rightarrow$  78 x 3 = 234  
546 + 234 = 780

Q16b. \$156  
B W:B,  
A W:B  
2:3, 4:6(10u)  
7-4=3  
234 $\div$ 3=78  
6-4=2  
78 x 2 = 156

Q17a. 7  $\rightarrow$  C  $\rightarrow$  7+5=12 , 7x3=21, 154-21=133, 12+7=19, 133 $\div$ 19=7

Q17b. \$70  $\rightarrow$  7+3=10, 10 x 7 = 70

Q18a. 160cm<sup>2</sup>  
3+1+1+3=8  
8u  $\rightarrow$  64  
1u  $\rightarrow$  64 $\div$ 8=8  
Total 24 x 8 = 192  
8 $\div$ 2=4  
 $\frac{1}{2}$  x 4 x 8 = 16  
16 x 2 = 32  
192 - 32 = 160

Q18b. 128cm<sup>2</sup>  
4 x 4 = 16  
8 x 2 = 16  
 $\frac{1}{2}$  x 16 x 16 = 128

**THE END**