

METHODIST GIRLS' SCHOOL (Primary)  
2009 End of Year Examination  
Primary 5

# MATHEMATICS

## PAPER 1 (BOOKLET A)

Name: \_\_\_\_\_ (      )

Class: P 5. \_\_\_\_\_

Booklet A (20)	
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Total time for Booklets A and B: 50 min

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Do not turn over this page 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 6 printed pages.

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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)

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1.  $7\,000\,000 + 50\,000 + 30 + 8 =$  \_\_\_\_\_
- (1) 750 038  
(2) 7 050 038  
(3) 7 050 308  
(4) 7 500 038
2. Evaluate  $402 + 58 \div 2 - 70 \times 3$ .
- (1) 70  
(2) 221  
(3) 480  
(4) 1 083
3. James has three times as many stamps as Peter. How many stamps must James give Peter so that each of them will have 256 stamps?
- (1) 32  
(2) 64  
(3) 128  
(4) 192

Go to page 3

4. Mr Lee earns \$2 000 a month. He spends \$1 400 and saves the remainder. What fraction of his salary is his savings?

(1)  $\frac{3}{7}$

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

(3)  $\frac{7}{10}$

(4)  $\frac{7}{3}$

5. How many ninths are there in  $9\frac{2}{3}$ ?

(1) 15

(2) 29

(3) 42

(4) 87

6. Express  $33 + \frac{2}{10} + \frac{79}{1000}$  as a decimal.

(1) 33.02079

(2) 33.0279

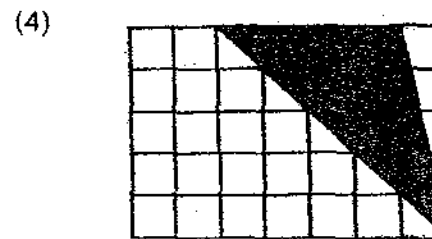
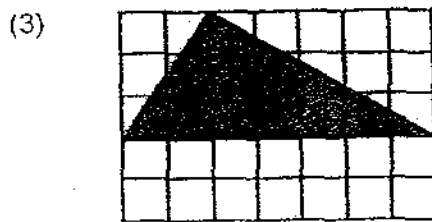
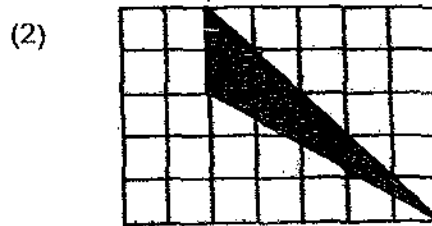
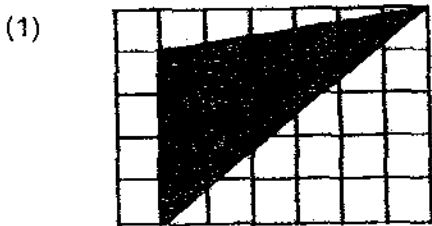
(3) 33.2079

(4) 33.279

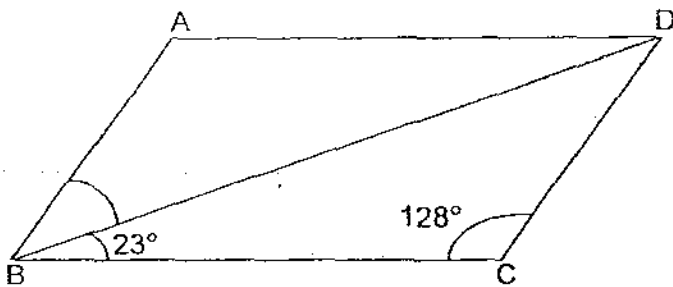
7. Charis has 20.48 m of ribbon. If she cuts it into 100 equal pieces, what would be the length of each piece of ribbon in cm?

- (1) 0.2048 cm  
 (2) 2.048 cm  
 (3) 2.48 cm  
 (4) 20.48 cm

8. Which of the following figures has the largest area?



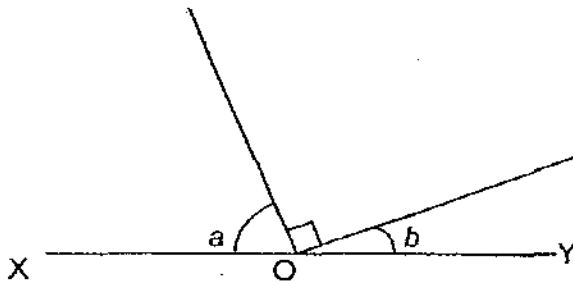
9. The following figure is not drawn to scale. ABCD is a parallelogram. Find  $\angle ABD$ .



- (1)  $29^\circ$   
 (2)  $52^\circ$   
 (3)  $67^\circ$   
 (4)  $105^\circ$

Go to page 5

10. The figure below is not drawn to scale. XOY is a straight line.  $\angle a$  is twice of  $\angle b$ . Find  $\angle a$ .



- (1)  $30^\circ$   
 (2)  $45^\circ$   
 (3)  $60^\circ$   
 (4)  $75^\circ$
11. Jane had  $\frac{5}{8}$  as many stickers as Sarah. After a game, she lost  $\frac{3}{10}$  of her stickers to Sarah. Express Jane's number of stickers as a fraction of Sarah's after the game.

(1)  $\frac{3}{16}$

(2)  $\frac{7}{16}$

(3)  $\frac{7}{19}$

(4)  $\frac{13}{40}$

12. Audrey took  $\frac{1}{2}$  h to complete her homework. Her brother took  $\frac{1}{4}$  h longer to complete his homework. Express the time taken by Audrey to complete her homework as a ratio to the time taken by her brother to complete his homework.

(1) 1 : 2

(2) 2 : 1

(3) 2 : 3

(4) 3 : 4

Go to page 6

13. The average weight of 8 girls is 45 kg. The total weight of 5 of the 8 girls is 110 kg. What is the total weight of the other 3 girls?
- (1) 135 kg
  - (2) 250 kg
  - (3) 360 kg
  - (4) 470 kg
14. A shirt and a pair of trousers cost \$45. The cost of the shirt is 80% of the cost of the pair of trousers. How much does the pair of trousers cost?
- (1) \$9
  - (2) \$20
  - (3) \$25
  - (4) \$36
15. The base of a cuboid is a square of sides 8 cm. The height of the cuboid is 5 cm. What is the volume of the cuboid?
- (1)  $37 \text{ cm}^3$
  - (2)  $80 \text{ cm}^3$
  - (3)  $320 \text{ cm}^3$
  - (4)  $1\,280 \text{ cm}^3$

End of Booklet A

METHODIST GIRLS' SCHOOL (Primary)  
2009 End of Year Examination  
Primary 5

**MATHEMATICS**

**PAPER 1  
(BOOKLET B)**

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

Class: P 5. \_\_\_\_\_

Booklet B (20)	
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Total time for Booklets A and B: 50 min

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Do not turn over this page 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 8 printed pages.

Questions 16 to 25 carry 1 mark each. 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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16.  $22 \times 7 = 154$

$66 \times 7 = \boxed{\phantom{000}} \times 154$

What is the missing number in the box?

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

17. Write five million, seven hundred and nine thousand and fifty-eight in numerals.

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

18.  $\frac{3}{5}$  of a pizza is shared equally among 9 girls. What fraction of the pizza does each girl get?

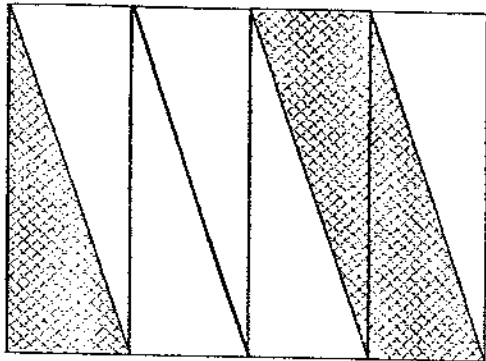
Ans: \_\_\_\_\_

Go to page 3

19. Mrs Tan had  $4\frac{7}{8}$  kg of sugar. She used  $\frac{4}{13}$  of it to bake a cake. How much sugar did she use to bake the cake?

Ans \_\_\_\_\_ kg

20. What fraction of the figure is shaded?



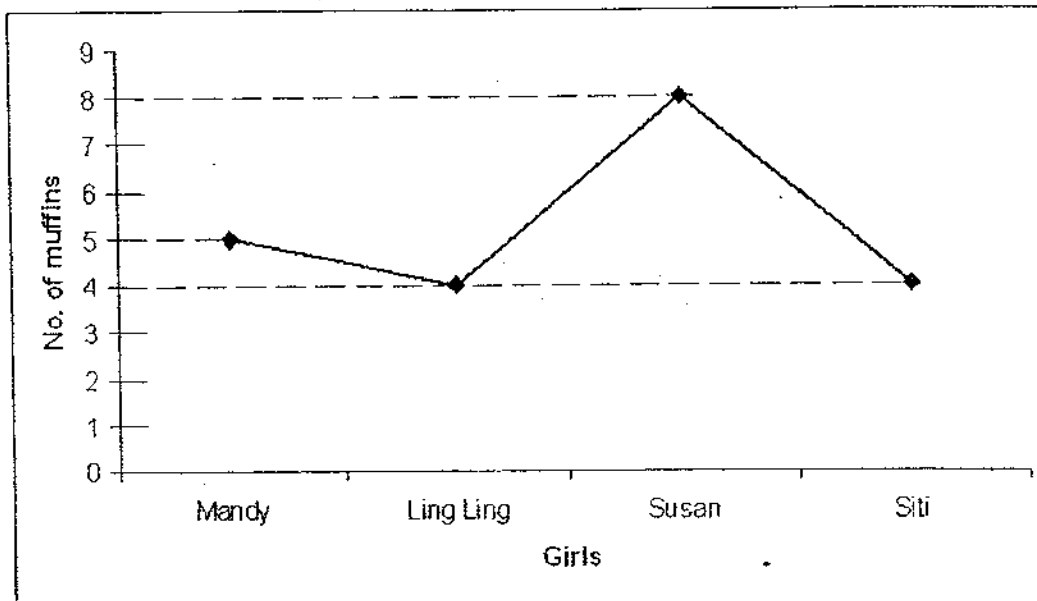
Ans: \_\_\_\_\_

Go to page 4

21. Express  $2\frac{2}{5} + \frac{1}{4}$  as a decimal correct to ~~2~~ <sup>1 decimal place</sup> decimal places.

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

22. The following line graph shows the number of muffins baked by 4 girls. After Mandy and Ling Ling had baked some more muffins, the average number of muffins baked by each girl became 8. How many more muffins did Mandy and Ling Ling bake altogether?



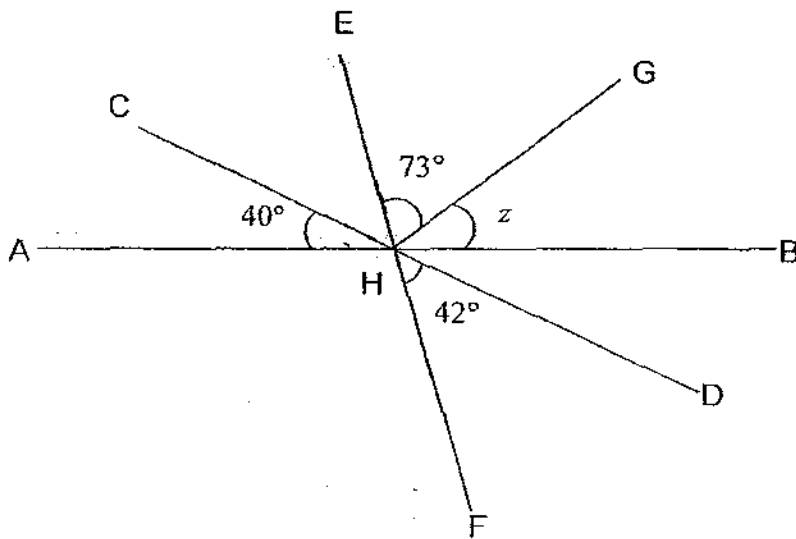
Ans: \_\_\_\_\_

Go to page 5

23. 150% of a number is 720. What is the number?

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

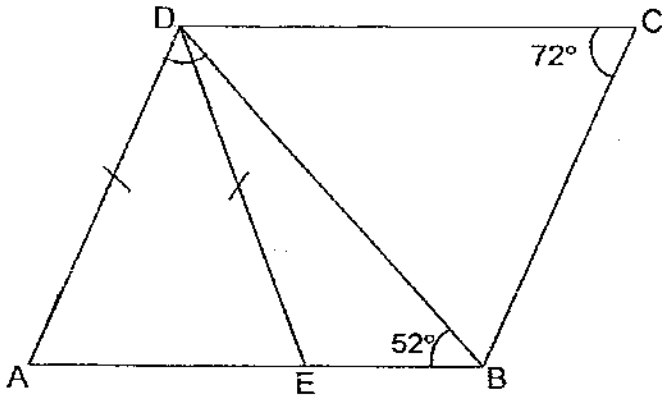
24. In the diagram not drawn to scale, AHB, CHD and EHF are straight lines.  
Find  $\angle z$ .



Ans: \_\_\_\_\_ $^\circ$

Go to page 6

25. In the figure below not drawn to scale,  $ABCD$  is a parallelogram and  $DA = DE$ . Find  $\angle ADB$ .



Ans: \_\_\_\_\_<sup>o</sup>

Go to page 7

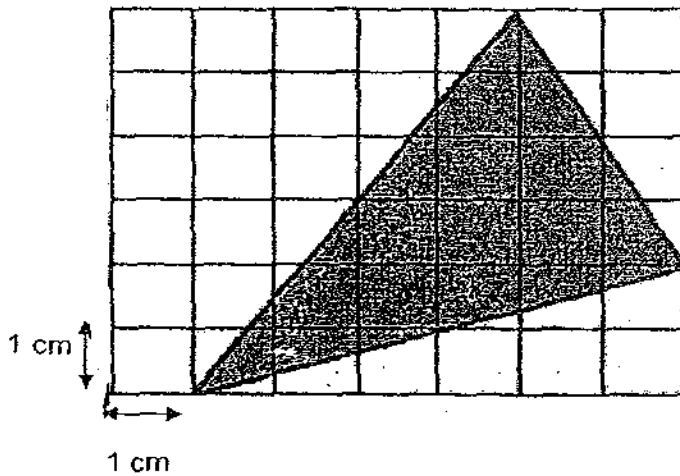
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

26. Gerry gives Hashid 35 stickers. Hashid gives Ivan 11 stickers. Ivan gives Gerry 18 stickers. Who has more stickers than before?

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

27. Find the area of the shaded triangle given that each square measures 1 cm by 1 cm.



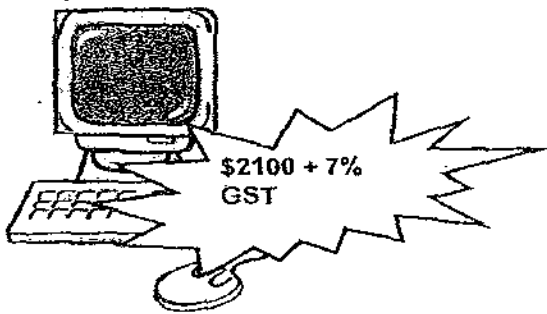
Ans: \_\_\_\_\_ cm<sup>2</sup>

Go to page 8

28. Ahmad and Nora share some paper clips in the ratio 9: 5. After Ahmad has given Nora 24 paper clips, they have the same number of paper clips. How many paper clips do they have altogether?

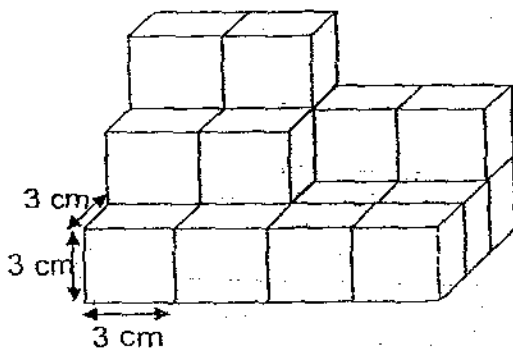
Ans: \_\_\_\_\_

29. Lydia paid \$2 100 for a computer. She also has to pay a 7% GST. How much GST did she pay?



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

30. Find the volume of the figure.



Ans: \_\_\_\_\_  $\text{cm}^3$

METHODIST GIRLS' SCHOOL (Primary)  
2009 End of Year Examination  
Primary 5

# Mathematics

## PAPER 2

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

Class: P 5. \_\_\_\_\_

Time: 1 h 40 min

Paper 1 Booklet A (20)	
Paper 1 Booklet B (20)	
Paper 2 (60)	
Total: (100)	

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

Follow all instructions carefully.

Answer all questions.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are allowed to use a calculator.

This booklet consists of 12 printed pages.

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)

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1. The number of red beads in a bag is  $\frac{6}{13}$  of the number of green beads. The total number of beads is 532. How many green beads are there in the bag?

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

2. Dylan has 50 paper clips. Bob has 30 more paper clips more than Dylan. What percentage of his paper clips must Bob give to Dylan so that both of them have the same number of paper clips?

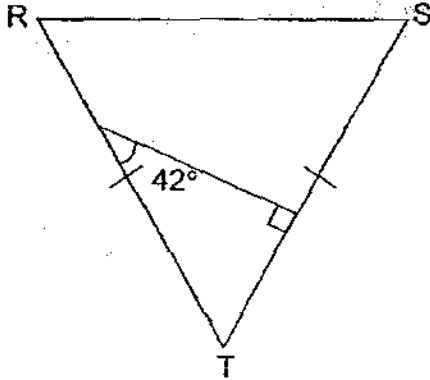
Ans: \_\_\_\_\_ %

3. Movie A started at 11.15 a.m. and ended at 1.05 p.m. If Movie B was 15 minutes longer than Movie A, how long was Movie B in hours and minutes?

Ans: \_\_\_\_ h \_\_\_\_ min

Go to page 3

4. The figure below is not drawn to scale. RST is an isosceles triangle.  $RT = ST$ . Find  $\angle TRS$ .



Ans: \_\_\_\_\_ $^\circ$

5. A rectangular tank, 30 cm long, 12 cm wide and 15 cm high, is half-filled with water. Another 1.8 l of water was poured into it. Find the volume of water in the tank in the end.

Ans: \_\_\_\_\_  $\text{cm}^3$

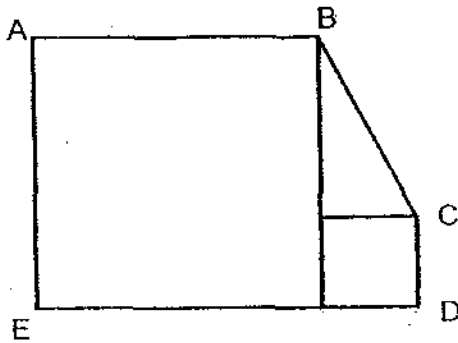
Go to page 4

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. The figure ABCDE is made up of two squares and a triangle. The perimeter of the big square is 60 cm and the area of the small square is  $16 \text{ cm}^2$ . Find the area of the triangle.



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

7. If Kenny buys 3 kg of sugar, he will have \$40.80 left. If he buys 5 kg of sugar, he will have \$29.20 left. How much money does Kenny have before buying the sugar?

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

8. Jessica and Lauren had an average of \$120. After Jessica received \$26 from her mother and Lauren spent \$62, Jessica had 5 times as much money as Lauren. How much money did Lauren have at first?

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

Go to page 5

9. There are 1578 sweets in a bottle, jar and bag. The bottle contains 93 sweets. The number of sweets in the bag is five times the total number of sweets in the bottle and the jar. How many sweets does the jar contain?

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

10. Ryan and Peter had 494 marbles altogether. When Ryan lost  $\frac{4}{9}$  of his marbles and Peter lost  $\frac{1}{2}$  of his marbles, they had an equal number of marbles left. How many marbles had Ryan at first?

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

Go to page 6

11. Draw a trapezium ABCD in which  $AD \parallel BC$ ,  $AB = 6.8$  cm,  $BC = 9.4$  cm,  $AD = 5$  cm, and  $\angle ABC = 75^\circ$ . [3]

12. Mr Lee had some doughnuts.

He sold  $\frac{1}{2}$  of it in the morning and  $\frac{1}{12}$  in the afternoon.

In the evening, he sold  $\frac{3}{10}$  of the remainder.

Just before he closed the shop, he sold  $\frac{4}{7}$  of the doughnuts that was left.

He then had 18 doughnuts left.

How many doughnuts did he have at first?

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

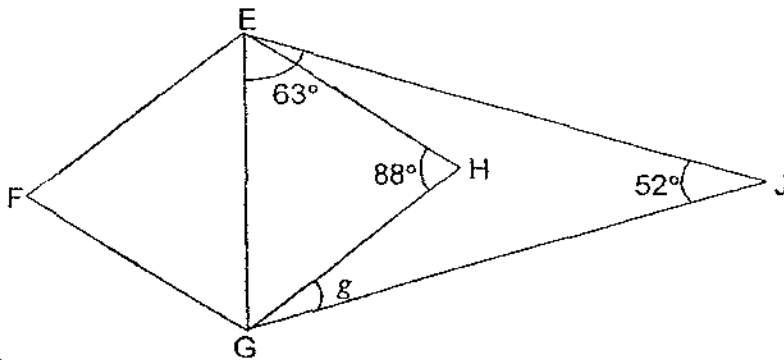
Go to page 7

13. A tank with a square base of edge 25 cm and a height of 40 cm is  $\frac{3}{4}$  filled with water. There is a tap at the bottom of the tank and water is flowing out at 1.5 l per minute. How long will it take for all the water in the tank to flow out?

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

$\angle GEJ$

14. The following figure is not drawn to scale. EFGH is a rhombus.  $\angle GEH = 63^\circ$ ,  $\angle EHG = 88^\circ$  and  $\angle EJJ = 52^\circ$ . Find  $\angle g$ .



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

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15. Emma spent  $\frac{2}{7}$  of her salary on clothes,  $\frac{3}{10}$  of the remainder on food, \$735 on transport and had \$840 left. What fraction of her salary did she spend on transport?

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

Go to page 9

16. Lenny has a total of 156 red and blue pens in the ratio 7: 6. After giving away an equal number of each type of pen, the number of red and blue pens left was in the ratio 7: 3. How many pens did she give away altogether?

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

Go to page 10

17. Nigel had some money. If he bought 25 notebooks, he would be short of \$18. If he bought 14 notebooks and 8 pens, he would have \$9 left over.
- (a) If each pen cost \$3.50, how much money does Nigel have?
- (b) What is the maximum number of notebooks can Nigel buy with his money?

Ans: (a) \_\_\_\_\_ [3]  
(b) \_\_\_\_\_ [2]

Go to page 11

18. In Sun glow Dancing Club, 70% of the members were men and the rest were women. When some new members joined the club, the number of women increased by 25% and the number of men increased to 4 650. If there are 1 800 women in the club at first, express the number of new members as a fraction of the total number of members at first in the simplest form?

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

☆ End of Paper ☆

# ANSWER SHEET

**EXAM PAPER 2009**

**SCHOOL : MGS PRIMARY**  
**SUBJECT : PRIMARY 5 MATEMATICS**

**TERM : SA2**

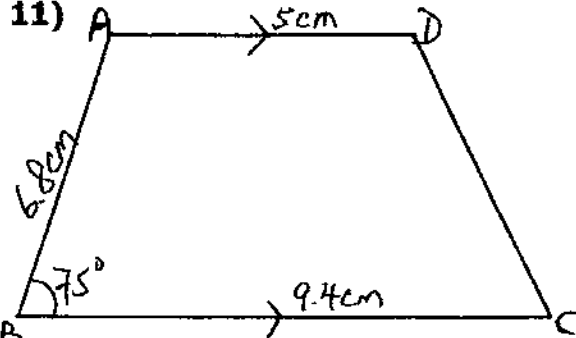
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	2	3	2	4	4	4	1	1	3	3	3	2	3	3

- 16)3      17)5709058      18)1/15      19)1½kg      20)3/8
- 21)2.7    22)11      23)480      24)25°      25)56°      26)Hashid
- 27)14cm<sup>2</sup>    28)168      29)\$147    30)540cm<sup>3</sup>

paper 2

<p>1) <math>532 \div 19 = 28</math>  <math>13 \times 28 = 364</math> beads</p>	<p>2) <math>50 + 30 = 80</math>  <math>80 - 50 = 30</math>  <math>30 \div 2 = 15</math>  <math>15/80 \times 100 = 18.75\%</math></p>
<p>3) <math>1\text{h} + 15\text{min} + 30\text{min} + 5\text{min} = 1\text{h}50\text{min}</math>  <math>1\text{h}50\text{min} + 15\text{min} = 2\text{h } 5\text{min}</math></p>	<p>4) <math>90^\circ - 42^\circ = 48^\circ</math>  <math>180^\circ - 48^\circ = 132^\circ</math>  <math>132^\circ \div 2 = 66^\circ</math></p>
<p>5) <math>\frac{1}{2} \times 30 \times 12 \times 15 = 2700</math>  <math>1.8\text{L} = 1800\text{cm}^3</math>  <math>2700 + 1800 = 4500\text{cm}^3</math></p>	<p>6) <math>60 \div 4 = 15</math>  <math>4 \times 4 = 16</math>  <math>15 - 4 = 11</math>  <math>\frac{1}{2} \times 11 \times 4 = 22\text{cm}^2</math>  The area of the triangle is 22cm<sup>2</sup></p>
<p>7) <math>\\$40.80 - \\$29.20 = \\$11.60</math>  <math>5 - 3 = 2</math>  <math>\\$11.60 \div 2 = \\$5.80</math>  <math>3 \times \\$5.80 = \\$17.40</math>  <math>\\$17.40 + \\$40.80 = \\$58.20</math>  Kenny has \$58.20</p>	<p>8) <math>\\$120 \times 2 = \\$240</math>  <math>\\$240 - \\$62 = \\$178</math>  <math>\\$178 + \\$26 = \\$204</math>  <math>\\$204 \div 6 = \\$34</math>  <math>\\$34 + \\$62 = \\$96</math>  Lauren had \$96 at first</p>

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<p>9) <math>6 \times 93 = 558</math>  <math>1578 - 558 = 1020</math>  <math>1020 \div 6 = 170</math>  The jar contains 170 sweets.</p>	<p>10) <math>494 \div 19 = 26</math>  <math>9 \times 26 = 234</math>  Ryan had 234 marbles at first</p>
<p>11) </p>	<p>12) <math>18 \div 3 = 6</math>  <math>24 \times 6 = 144</math>  He had 144 doughnuts at first</p>
<p>13) <math>\frac{3}{4} \times 25 \times 25 \times 40 = 18750</math>  <math>1.5L = 1500\text{cm}^3</math>  <math>18750 \div 1500 = 12.5</math>  It will take 12.5 minutes for all the water in the tank to flow out.</p>	<p>14) <math>180^\circ - 88^\circ = 92^\circ</math>  <math>92^\circ \div 2 = 46^\circ</math>  <math>180^\circ - 52^\circ - 63^\circ = 65^\circ</math>  <math>65^\circ - 46^\circ = 19^\circ</math>  <math>\angle g</math> is <math>19^\circ</math></p>
<p>15) <math>\\$735 + \\$840 = \\$1575</math>  <math>\\$1575 \div 7 = \\$225</math>  <math>14 \times \\$225 = \\$3150</math>  <math>735/3150 = 7/30</math>  She spent <math>7/30</math> of her salary on transport.</p>	<p>16) <math>156 \div 13 = 12</math>  <math>12 \times 7 = 84</math>  <math>12 \times 6 = 72</math>  <math>84 - 63 = 21</math>  <math>72 - 63 = 9</math>  <math>21 \div 7 = 3</math>  <math>3 \times 3 = 9</math>  <math>63 + 63 = 126</math>  She gave away 126 pens altogether.</p>
<p>17) a) <math>8 \times \\$3.50 = \\$28</math>  <math>\\$28 + \\$9 = \\$37</math>  <math>\\$37 + \\$18 = \\$55</math>  <math>25 - 14 = 11</math>  <math>\\$55 \div 11 = \\$5</math>  <math>25 \times \\$5 = \\$125</math>  <math>\\$125 - \\$18 = \\$107</math>  Nigel has \$107.  b) <math>\\$107 \div \\$5 = \approx 21</math></p>	<p>18) <math>100\% \rightarrow 1800</math>  <math>125\% \rightarrow 125/100 \times 1800 = 2250</math>  <math>2250 - 1800 = 450</math>  <math>100\% - 70\% = 30\%</math>  <math>30\% \rightarrow 1800</math>  <math>70\% \rightarrow 70/100 \times 1800 = 4200</math>  <math>4650 - 4200 = 450</math>  <math>450 + 450 = 900</math>  <math>900/6000 = 3/20</math>  The fraction is <math>3/20</math></p>