



ROSYTH SCHOOL  
2018 SEMESTRAL ASSESSMENT 2  
MATHEMATICS  
PAPER 1  
PRIMARY 5

Name: \_\_\_\_\_

Register No. \_\_\_\_\_

Class: Pr 5 - \_\_\_\_\_

Date: 30<sup>th</sup> October 2018

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

Total Time for Booklets A and B : 1 hour

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**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)

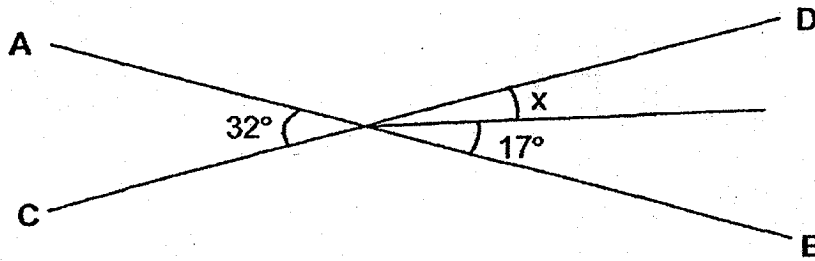
Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.  
For each question, four options are given. One of them is the correct answer.  
Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

**All diagrams in this paper are not drawn to scale unless stated otherwise.**

(20 marks)

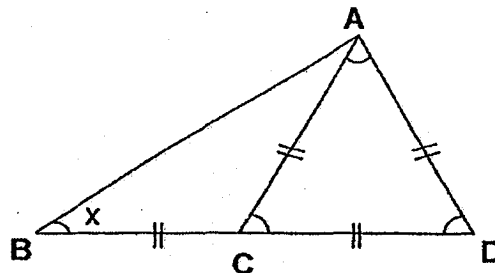
1. Which one of the following shows six million and fifty thousand?
  - (1) 6 000 050
  - (2) 6 000 500
  - (3) 6 005 000
  - (4) 6 050 000
2. What is the value of the digit 8 in 1 980 524?
  - (1) 80
  - (2) 800
  - (3) 8 000
  - (4) 80 000
3. What is the missing value in  $27 \div \square = 0.27$ ?
  - (1) 1
  - (2) 10
  - (3) 100
  - (4) 1 000
4. Janani has 5 pens and 2 erasers in her pencil case. What is the ratio of the number of pens to the number of erasers?
  - (1) 2 : 5
  - (2) 5 : 2
  - (3) 2 : 7
  - (4) 5 : 7

5. AB and CD are straight lines. Find  $\angle x$ .



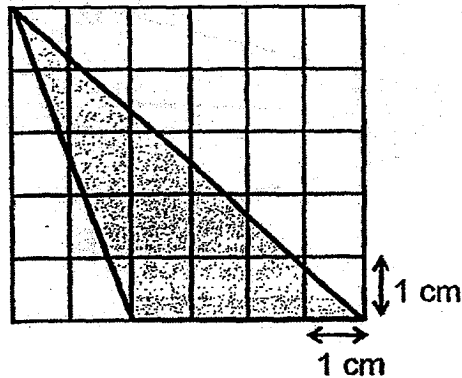
- (1)  $15^\circ$
- (2)  $17^\circ$
- (3)  $32^\circ$
- (4)  $148^\circ$

6. In the figure below,  $AC = BC$ . BCD is a straight line. Triangle ACD is an equilateral triangle. Find  $\angle x$ .



- (1)  $20^\circ$
- (2)  $30^\circ$
- (3)  $60^\circ$
- (4)  $120^\circ$

7. Calculate the area of the shaded triangle.



- (1)  $5 \text{ cm}^2$   
 (2)  $7 \text{ cm}^2$   
 (3)  $10 \text{ cm}^2$   
 (4)  $15 \text{ cm}^2$
8. 2 litres of fruit juice was shared by 16 children. How many litres of fruit juice would each child receive?
- (1)  $\frac{1}{8} \text{ l}$   
 (2)  $\frac{1}{4} \text{ l}$   
 (3)  $4 \text{ l}$   
 (4)  $8 \text{ l}$
9. The diagram below shows different shapes of rectangles, triangles and circles. What percentage of all these shapes are triangle?



- (1) 20%  
 (2) 50%  
 (3) 40%  
 (4) 60%

10. Ahmad scored an average of 74 marks for two tests. He scored 70 marks in his first test. How many marks did he score in his second test?

(1) 66  
(2) 72  
(3) 74  
(4) 78

11. Mrs Sim bought a 2.15 kg bag of sugar. At the end of 5 days, she used up all the sugar. She used an equal amount of sugar each day. How much sugar did she use each day?

(1) 0.43 kg  
(2) 0.403 kg  
(3) 4.03 kg  
(4) 4.30 kg

12. John attended an 8-hour camp during the school holidays.  $\frac{1}{2}$  of the time was spent on drama activities. He spent  $\frac{3}{4}$  h on lunch. The rest of the time was spent on craft activities. How much time was spent on craft activities?

(1)  $\frac{1}{4}$  h  
(2)  $1\frac{1}{4}$  h  
(3)  $3\frac{1}{4}$  h  
(4)  $6\frac{3}{4}$  h

13. Mary packed some flour in packets. Each packet contained  $\frac{1}{4}$  kg of flour. In the end, she had 6 packets and 70 g of flour left. How many grams of flour did she pack
- (1) 1120 g
  - (2) 1500 g
  - (3) 1570 g
  - (4) 2200 g
14. The number of fifty-cent coins that Patricia has is twice the number of one-dollar coins. The total value of all the coins is \$120. How many fifty-cent coins does she have?
- (1) 40
  - (2) 60
  - (3) 80
  - (4) 120
15. A cubical container of edge 10 cm was  $\frac{3}{4}$  filled with water.  $\frac{1}{4}$  of the water was poured out. How much water remained in the container?
- (1) 187.5 cm<sup>3</sup>
  - (2) 500 cm<sup>3</sup>
  - (3) 562.5 cm<sup>3</sup>
  - (4) 750 cm<sup>3</sup>



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Class: Pr 5 - \_\_\_\_\_

Date: 30<sup>th</sup> October 2018

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

Total Time for Booklets A and B : 1 hour

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**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. Write your answers in the booklet.
5. Answer all questions.

| Section             | Maximum Mark | Marks Obtained |
|---------------------|--------------|----------------|
| Paper 1 (Booklet B) | 25           |                |

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

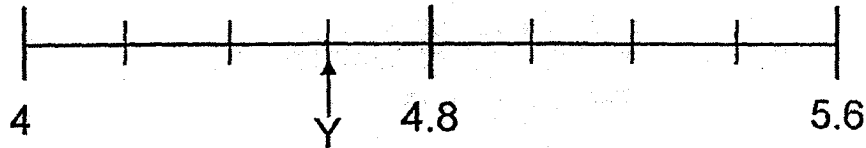
Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

**All diagrams in this paper are not drawn to scale unless stated otherwise.**

(5 marks)

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16. What is the value of Y?



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

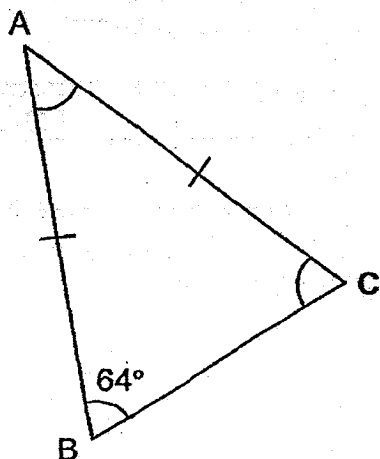
17. What is the remainder when 7102 is divided by 7?

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

18. There were 8 pizzas. The children ate  $\frac{4}{5}$  of the pizzas. How many pizzas were left? Express your answer as a mixed number in its simplest form.

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

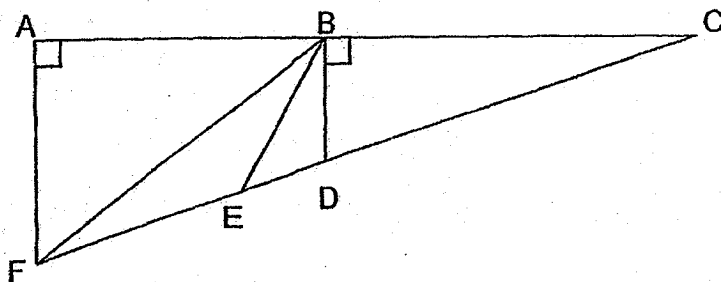
19. Triangle ABC is an isosceles triangle. Find the value of  $\angle BAC$ .



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Ans: \_\_\_\_\_°

20. Name the height of triangle BCF.



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.

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in this space

**All diagrams in this paper are not drawn to scale unless stated otherwise.**  
(20 marks)

21. There were two packets of flour on the table. Packet A had 300g more flour than Packet B. 1.6 kg of flour was transferred from Packet B to Packet A. How many more kilograms of flour did packet A have than Packet B?

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

22. Shamini and Mandy had some bookmarks. They bought 10 more bookmarks each. After that, the number of bookmarks that Shamini had to the number of bookmarks Mandy had was 3 : 1. Mandy had 18 bookmarks in the end. How many bookmarks did Shamini have at first?

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

23. The table below shows the number of students in each class in a kindergarten.

| Class              | A  | B  | C  |
|--------------------|----|----|----|
| Number of students | 20 | 12 | 15 |

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The average number of pencils owned by each pupil is 2.  
Find the total number of pencils owned by all the students in the kindergarten.

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

24. Mr Lim is 40 years old now. His son is 24 years younger than him. What will be their combined age three years later?

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

25. The line AB is 8 cm long. Using the line AB given, construct triangle ABC such that  $\angle ABC = 38^\circ$ . The line AB is equal to the line BC. Label the triangle.

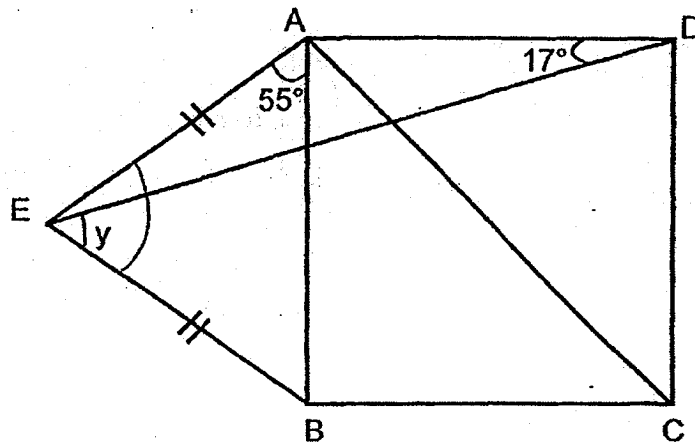
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26. Mr Menon bought a sofa set which cost \$1200 before a GST of 7%. What was the amount of GST that he had to pay for the sofa set?

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

27. ABCD is a square. ABE is an isosceles triangle.  $\angle EAB = 55^\circ$  and  $\angle ADE = 17^\circ$ . Find  $\angle y$ .

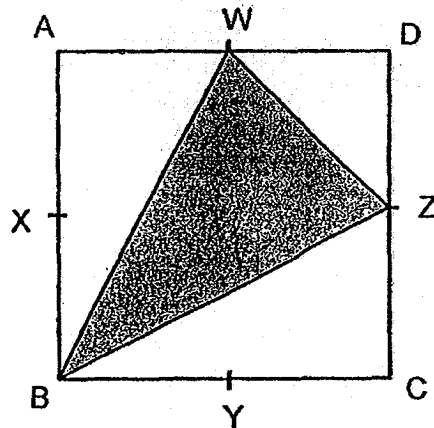


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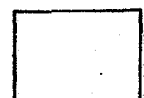
Ans: \_\_\_\_\_



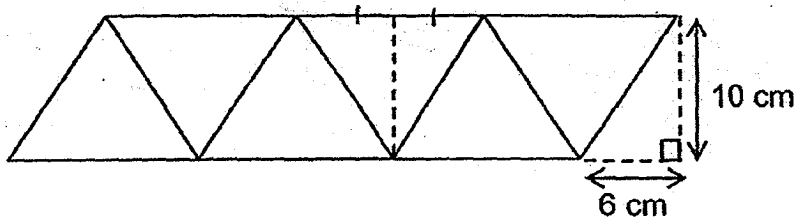
28. W, X, Y and Z are the mid-points of the sides of a square ABCD. The area of the square is  $64 \text{ cm}^2$ , what is the area of the shaded triangle?



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



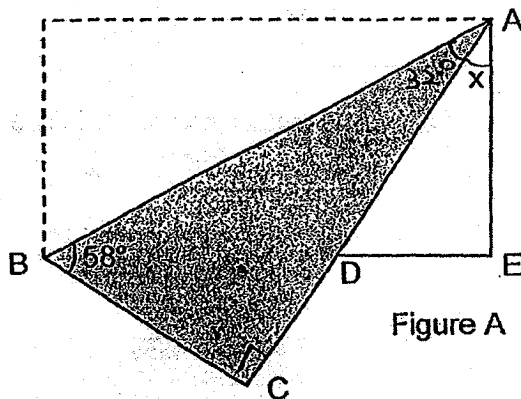
29. The figure below is made up of 6 similar triangles.  
Find the total area of the figure.



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

30. Sarah folded a rectangular piece of paper, coloured on one side, to form Triangle ABC and Triangle ADE. Find  $\angle x$ .



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



ROSYTH SCHOOL  
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MATHEMATICS  
PAPER 2  
PRIMARY 5

Name: \_\_\_\_\_

Register No. \_\_\_\_\_

Class: Pr 5 - \_\_\_\_\_

Date: 30<sup>th</sup> Oct 2018

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

Time: 1 h 30 min

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 17 | 45           |                |

| Section | Maximum Mark | Marks Obtained |
|---------|--------------|----------------|
| Paper 1 | 45           |                |
| Paper 2 | 55           |                |
| Total   | 100          |                |

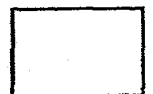
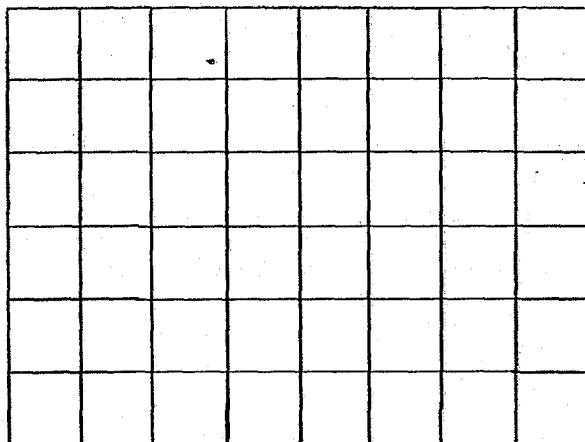
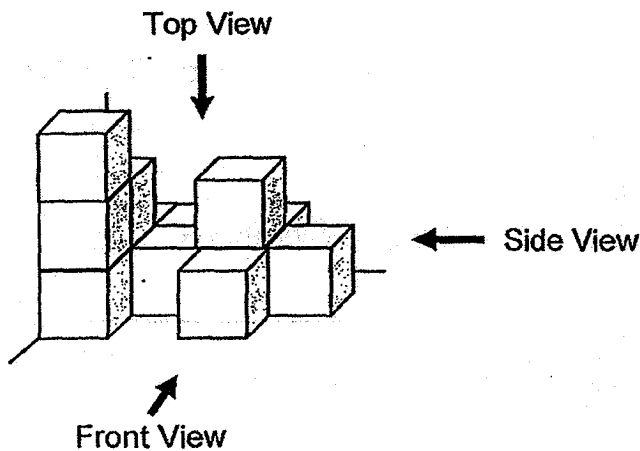
\* This booklet consists of 15 pages (including this cover page)

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.

**All diagrams in this paper are not drawn to scale unless stated otherwise.**

(10 marks)

1. Draw the side view of the solid given below in the square grid.



2. The table below shows the charges for a taxi ride.

|                                               |                                                 |
|-----------------------------------------------|-------------------------------------------------|
| First kilometre and up to the tenth kilometre | 25 cents<br>for every 400 metre or part thereof |
| After the tenth kilometre                     | 30 cents<br>for every 300 metre or part thereof |

There is a fee of \$3.50 when a person boards the taxi. Peter boarded a taxi and travelled a distance of 8 km. How much did he pay for the ride in total?

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

3. Eason has 3 cards, each with a different whole number printed on it. When he multiplies 2 numbers at a time, he gets the answers 24, 48, and 72. What is the answer when he multiplies all 3 numbers on the cards together?

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

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4. The table below shows the number of students who visited a bookshop from Monday to Friday in a week.

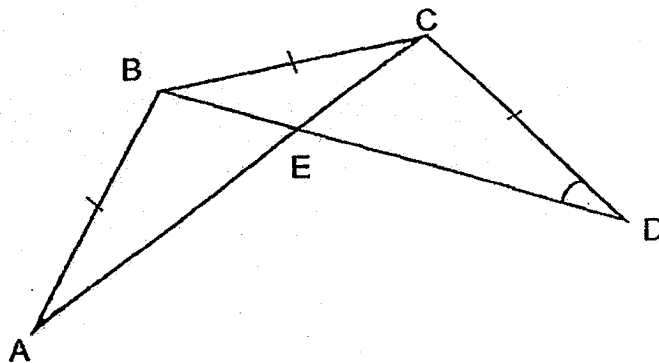
| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------|---------|-----------|----------|--------|
| 82     | 96      | 60        | 70       | ?      |

The average number of students who visited the bookshop from Monday to Friday in that week was 74. How many students visited the bookshop on Friday?

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

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5. In the figure below, AEC and BED are straight lines.  $AB = BC = CD$ .  $\angle BAC$  is greater than  $30^\circ$  and  $\angle BEC$  is an obtuse angle.



Each statement below is true, false or not possible to tell from the information given. For each statement, put a tick ( $\checkmark$ ) in the correct column.

| Statement                                | True | False | Not possible to tell |
|------------------------------------------|------|-------|----------------------|
| Triangle BCD is an equilateral triangle. |      |       |                      |
| $\angle BAC = \angle CDB$                |      |       |                      |

For Questions 6 to 17, 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. For questions which require units, give your answers in the units stated.

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**All diagrams in this paper are not drawn to scale unless stated otherwise.**

(45 marks)

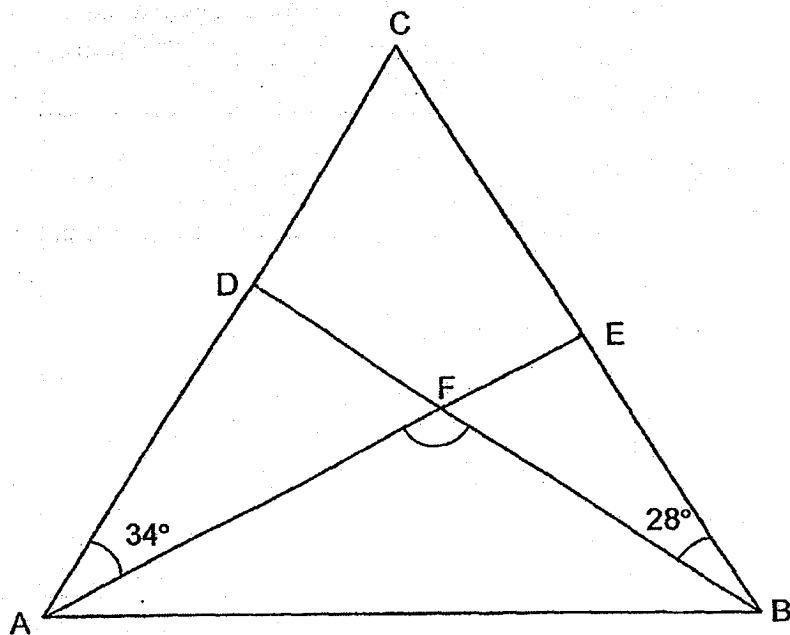
6. Mdm Rani baked some cookies and puffs.  $\frac{2}{7}$  of what she had baked were cookies.  $\frac{3}{4}$  of the cookies and  $\frac{1}{6}$  of the puffs were sold. If the total number of cookies and puffs left was 64, how many cookies and puffs did she bake altogether?

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



7. Triangle ABC is an equilateral triangle. AE and BD are straight lines. Find  $\angle AFB$ .

Do not write  
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Ans: \_\_\_\_\_ [3]



8. Liling has 200 pencils and Sharon has some pens. After Sharon has given 52 pens to Liling, the ratio of the number of pencils and pens Liling has to the number of pens Sharon has is 4 : 1.

Do not write  
in this space

- (a) What was the total number of pens and pencils Liling had in the end?  
(b) What was the total number of pens and pencils Liling and Sharon had?

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

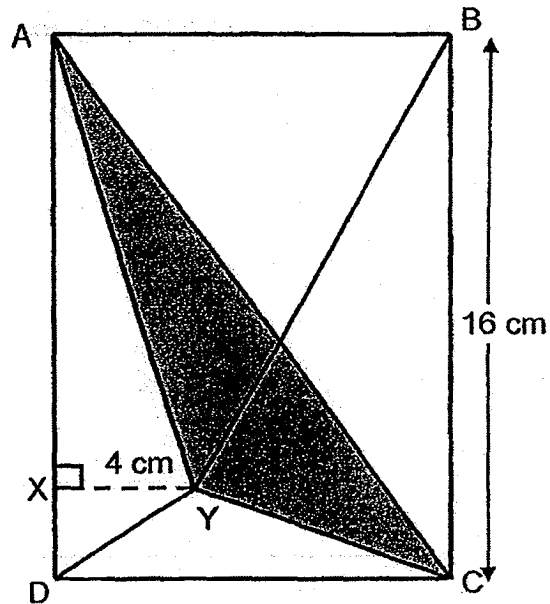
(b) \_\_\_\_\_ [3]

9. Joel has a bag of sugar, a bag of flour and a bag of milk powder. He weighs only 2 bags at a time. The total mass of the sugar and flour is 5.7 kg. The total mass of the flour and milk powder is 6 kg. The total mass of the sugar and milk powder is 340 g. What is the total mass of the bags of sugar, flour and milk powder in kilograms?

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

10. The figure below shows a rectangle ABCD. BC is 16 cm and XY is 4 cm. AY, BY, CY and DY are straight lines. The area of triangle CDY is  $18 \text{ cm}^2$ . The area of triangle ABY is  $78 \text{ cm}^2$ . Find the area of the shaded triangle ACY.

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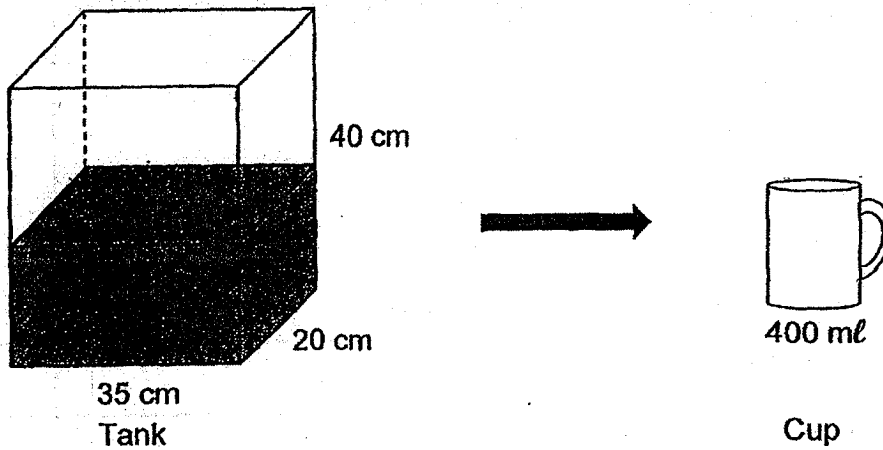
Ans: \_\_\_\_\_ [3]



11. A rectangular tank measured 35 cm by 20 cm by 40 cm was  $\frac{2}{5}$  filled with water. All the water was then poured into some cups. Each cup had a capacity of 400 ml.

Do not write in this space

- (a) What was the volume of the water in the tank?  
(b) How many of such cups were filled completely?



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

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



12. A box of cookies cost \$3. A free box of cookies was given for every purchase of 3 boxes of cookies. Don spent \$240 buying some boxes of cookies.

Do not write  
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- (a) How many boxes of cookies did Don buy?
- (b) There were 12 cookies in each box. Don opened all the boxes and repacked the cookies into containers. There were 9 cookies in each container. How many containers did he use to pack all the cookies?

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

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



13. Minah bought some books at an average price of \$22 each. Then she bought another 2 books for \$46 each and the average price became \$28. How many books did she buy altogether?

Do not write  
in this space

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



14. Jun Xiang received 4 coins from his mother every day. Each coin was either a 10¢ or a 50¢ coin. Jun Xiang gave his younger sister two 50¢ coins every 5 days. The total value of his coins after 60 days was \$96.

Do not write  
in this space

- (a) How many coins did Jun Xiang have in the end?
- (b) How many of the coins in the end were 50¢ coins?

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

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



15. The table below shows the prices of some items sold in a bookshop.

Do not write in this space

| Item                                | Price (\$) |
|-------------------------------------|------------|
| Calculator                          | \$21       |
| Protractor                          | \$0.40     |
| Coloured pen (one box)              | \$16       |
| Highlighters<br>(1 set of 6 pieces) | \$10.20    |

There was a storewide discount of 10% on all items in the bookshop. Weiming bought a calculator, 3 protractors and 2 sets of highlighters.

- (a) What was the total price of the items Weiming had bought after discount?
- (b) Inclusive of 7% of GST, how much did Weiming pay for the items? Give your answer correct to the nearest dollar.

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

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



16. Alynna signed up for a KTel monthly mobile subscription plan as shown below:

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| Usage                                 | Rate                |
|---------------------------------------|---------------------|
| Outgoing call first 100 minutes       | FREE                |
| Outgoing call after first 100 minutes | 15 cents per minute |
| Data usage charges for first 1 GB     | FREE                |
| Data usage charges after first 1 GB   | \$8.50 per GB       |

- (a) How much would Alynna have to pay if she made a total of 238 minutes of outgoing call?
- (b) How much data did Alynna use in all if she had to pay \$25.50 for the data charges?

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

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



17. Tom worked for a week from Monday to Friday and was paid \$7 per hour. He used  $\frac{3}{5}$  of the money he earned and an additional \$36 to buy some books. He spent  $\frac{1}{2}$  of the remaining money and an additional \$20 on some stationery. He saved the \$32 that was left.

Do not write  
in this space

- (a) How much did he spend on the stationery?
- (b) What was the total number of hours he had worked from Monday to Friday?

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

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



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**End of paper**  
**Have you checked your work?**

1. The first part of the paper is a multiple choice section. It consists of 10 questions, each with four possible answers. You are to select the correct answer for each question.

2. The second part of the paper is a short answer section. It consists of 5 questions, each requiring a short, concise answer.

# P5 SA2 Mathematics 2018 Paper 1 worked solutions.

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 in this paper are not drawn to scale unless stated otherwise.

(20 marks)

1. Which one of the following shows six million and fifty thousand?

- (1) 6 000 050  
(2) 6 000 500  
(3) 6 005 000  
(4) 6 050 000

(4)

2. What is the value of the digit 8 in 1 980 524?

- (1) 80  
(2) 800  
(3) 8 000  
(4) 80 000

(4)

3. What is the missing value in  $27 \div \square = 0.27$ ?

$$\begin{aligned} 0.27 &= \frac{27}{100} \\ &= 27 \div 100 \end{aligned}$$

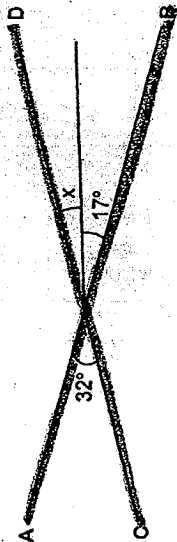
(3)

4. Janani has 5 pens and 2 erasers in her pencil case. What is the ratio of the number of pens to the number of erasers?

$$\begin{aligned} P : E \\ 5 : 2 \end{aligned}$$

(2)

5. AB and CD are straight lines. Find  $\angle x$ .

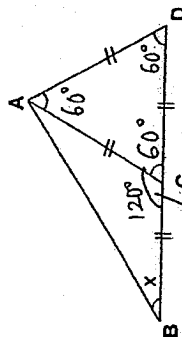


- (1) 15°  
(2) 17°  
(3) 32°  
(4) 148°

$$\begin{aligned} \angle x &= 32^\circ - 17^\circ \\ &= 15^\circ \end{aligned}$$

(1)

6. In the figure below, AC = BC. BCD is a straight line. Triangle ACD is an equilateral triangle. Find  $\angle x$ .

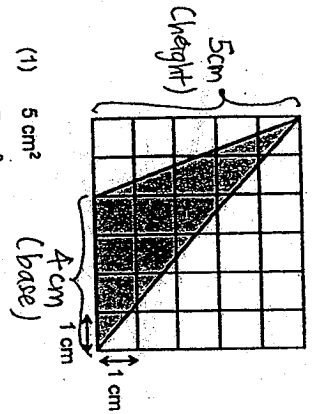


- (1) 20°  
(2) 30°  
(3) 60°  
(4) 120°

$$\begin{aligned} 180^\circ - 60^\circ &= 120^\circ \\ \angle x &= (180^\circ - 120^\circ) \div 2 \\ &= 30^\circ \end{aligned}$$

(2)

7. Calculate the area of the shaded triangle.



- (1)  $5 \text{ cm}^2$   
 (2)  $7 \text{ cm}^2$   
 (3)  $10 \text{ cm}^2$   
 (4)  $15 \text{ cm}^2$

(3)

8. 2 litres of fruit juice was shared by 16 children. How many litres of fruit juice would each child receive?

$$\begin{aligned} (1) \quad & \frac{1}{8} \text{ l} \\ (2) \quad & \frac{1}{4} \text{ l} \\ (3) \quad & 4 \text{ l} \\ (4) \quad & 8 \text{ l} \end{aligned}$$

$$2 \text{ l} \div 16 = \frac{2}{16} \text{ l} = \frac{1}{8} \text{ l}$$

(1)

9. The diagram below shows different shapes of rectangles, triangles and circles. What percentage of all these shapes are triangles?



$$\frac{4}{9} \times 100\% = 44.4\%$$

(3)

- (1) 20%  
 (2) 50%  
 (3) 40%  
 (4) 60%

4

(Go on to the next page)

10. Ahmad scored an average of 74 marks for two tests. He scored 70 marks in his first test. How many marks did he score in his second test?

- (1) 68  
 (2) 72  
 (3) 74  
 (4) 78

$$\begin{aligned} 74 \times 2 &= 148 \\ 148 - 70 &= 78 \end{aligned}$$

(4)

11. Mrs Sim bought a 2.15 kg bag of sugar. At the end of 5 days, she used up all the sugar. She used an equal amount of sugar each day. How much sugar did she use each day?

- (1) 0.43 kg  
 (2) 0.403 kg  
 (3) 4.03 kg  
 (4) 4.30 kg

$$\begin{array}{r} 0.43 \\ 5 \overline{) 2.15} \\ \underline{20} \phantom{0} \\ 15 \phantom{0} \\ \underline{15} \phantom{0} \\ 0 \end{array}$$

(1)

12. John attended an 8-hour camp during the school holidays.  $\frac{1}{2}$  of the time was spent on drama activities. He spent  $\frac{3}{4}$  h on lunch. The rest of the time was spent on activities. How much time was spent on craft activities?

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

$$\begin{aligned} \frac{1}{2} \times 8 \text{ h} &= 4 \text{ h (drama)} \\ 8 \text{ h} - 4 \text{ h} - \frac{3}{4} \text{ h} &= 4 \text{ h} - \frac{3}{4} \text{ h} \\ &= 3\frac{1}{4} \text{ h} \end{aligned}$$

(3)

5

(Go on to the next page)

13. Mary packed some flour in packets. Each packet contained  $\frac{1}{4}$  kg of flour. In the end, she had 6 packets and 70 g of flour left. How many grams of flour did she pack?

- (1) 1120 g  
(2) 1500 g  
(3) 1570 g  
(4) 2200 g

$$\frac{1}{4} \text{ kg} = \frac{1}{4} \times 1000 \text{ g}$$

$$= 250 \text{ g}$$

$$250 \text{ g} \times 6 = 1500 \text{ g} \quad (2)$$

$$50¢ : \$1$$

→

14. The number of fifty-cent coins that Patricia has is twice the number of one-dollar coins. The total value of all the coins is \$120. How many fifty-cent coins does she have?

- (1) 40  
(2) 60  
(3) 80  
(4) 120

$$1 \text{ group of 3 coins} = \$0.50 \times 2 + \$1 = \$2$$

$$\$120 \div \$2 = 60 \text{ (groups)}$$

$$60 \times 2 = 120$$

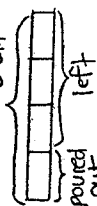
(4)

15. A cubical container of edge 10 cm was  $\frac{3}{4}$  filled with water.  $\frac{1}{4}$  of the water was poured out. How much water remained in the container?

- (1) 187.5 cm<sup>3</sup>  
(2) 500 cm<sup>3</sup>  
(3) 562.5 cm<sup>3</sup>  
(4) 750 cm<sup>3</sup>

$$\frac{3}{4} \times 10 \text{ cm} \times 10 \text{ cm} \times 10 \text{ cm} = 750 \text{ cm}^3$$

water available



$$4u = 750 \text{ cm}^3$$

$$1u = 750 \text{ cm}^3 \div 4$$

$$= 187.5 \text{ cm}^3$$

$$3u = 187.5 \text{ cm}^3 \times 3$$

$$= 562.5 \text{ cm}^3$$

(3)

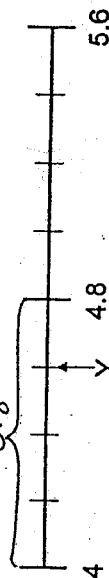
6

(Go to Booklet B)

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.

All diagrams in this paper are not drawn to scale unless stated otherwise. (5 marks)

16. What is the value of Y?



$$4 \text{ gaps} - 0.8$$

$$1 \text{ gap} - 0.8 \div 4 = 0.2$$

$$3 \text{ gaps} - 0.2 \times 3 = 0.6$$

$$4 + 0.6 = 4.6$$

Ans: 4.6

17. What is the remainder when 7102 is divided by 7?

$$\begin{array}{r} 1014 \\ 7 \overline{) 7102} \\ \underline{7} \phantom{0} \phantom{2} \\ 01 \phantom{2} \\ \underline{0} \phantom{2} \\ 10 \phantom{2} \\ \underline{7} \phantom{2} \\ 32 \\ \underline{28} \\ 4 \end{array}$$

4 ← remainder

Ans: 4

18. There were 8 pizzas. The children ate  $\frac{4}{5}$  of the pizzas. How many pizzas were left? Express your answer as a mixed number in its simplest form.

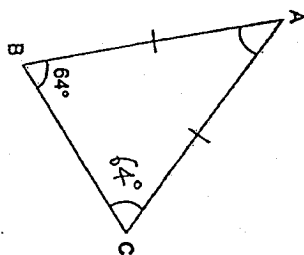
$$1 - \frac{4}{5} = \frac{1}{5}$$

$$\frac{1}{5} \times 8 = \frac{8}{5}$$

$$= 1\frac{3}{5}$$

Ans: 1  $\frac{3}{5}$

19. Triangle ABC is an isosceles triangle. Find the value of  $\angle BAC$ .

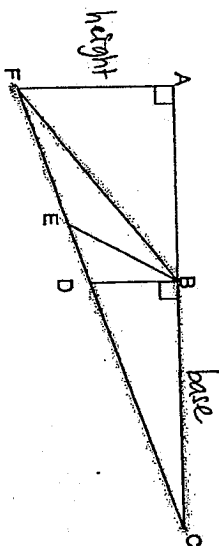


$$\begin{aligned}\angle BAC &= 180^\circ - 128^\circ \\ &= 52^\circ\end{aligned}$$

Ans: 52.

Do not write in this space

20. Name the height of triangle BCF.

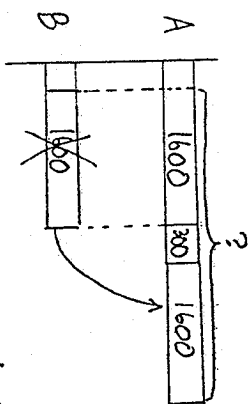


Ans: AF

Questions 21 to 30 carry 2 marks each. Show your workings clearly in the spaces provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams in this paper are not drawn to scale unless stated otherwise. (20 marks)

- 21.

There were two packets of flour on the table. Packet A had 300g more flour than Packet B. 1.6 kg of flour was transferred from Packet B to Packet A. How many more kilograms of flour did packet A have than Packet B?



$$1.6 \text{ kg} = 1600 \text{ g}$$

$$1600 \text{ g} + 300 \text{ g} + 1600 \text{ g} = 3500 \text{ g}$$

Ans: 3.5 kg

- 22.

Shamini and Mandy had some bookmarks. They bought 10 more bookmarks each. After that, the number of bookmarks that Shamini had to the number of bookmarks Mandy had was 3 : 1. Mandy had 18 bookmarks in the end. How many bookmarks did Shamini have at first?

After

$$S : M$$

$$3 : 1$$

$$1 \text{ unit} = 18$$

$$3 \text{ units} = 18 \times 3$$

$$= 54 \text{ (S - at last)}$$

$$54 - 10 = 44$$

Ans: 44

23. The table below shows the number of students in each class in a kindergarten.

| Class              | A  | B  | C  |
|--------------------|----|----|----|
| Number of students | 20 | 12 | 15 |

The average number of pencils owned by each pupil is 2.  
Find the total number of pencils owned by all the students in the kindergarten.

$$20 + 12 + 15 = 47 \text{ (total no. of students)}$$

$$47 \times 2 = 94$$

Ans: 94

24. Mr Lim is 40 years old now. His son is 24 years younger than him. What will be their combined age three years later?

Now

$$\text{Lim} - 40$$

$$\text{Son} - 40 - 24 = 16$$

Future (3 years later)

$$\text{Lim} - 40 + 3 = 43$$

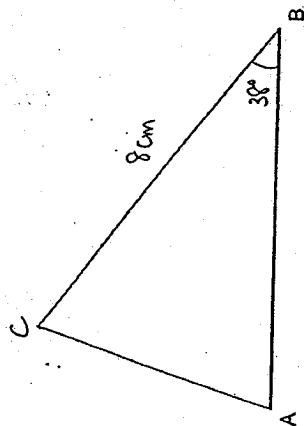
$$\text{Son} - 16 + 3 = 19$$

$$43 + 19 = 62$$

Ans: 62

- 25.

The line AB is 8 cm long. Using the line AB given, construct triangle ABC such that  $\angle ABC = 38^\circ$ . The line AB is equal to the line BC. Label the triangle.



26. Mr Menon bought a sofa set which cost \$1200 before a GST of 7%. What was the amount of GST that he had to pay for the sofa set?

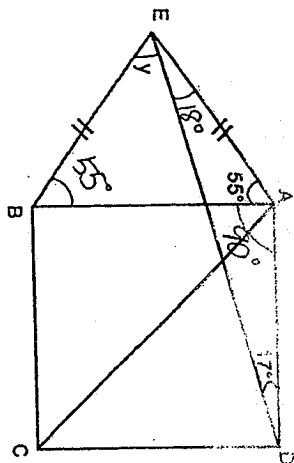
$$7\% \times \$1200 = \frac{7}{100} \times \$1200$$

$$= 7 \times \$12$$

$$= \$84$$

Ans: \$ 84

4. ABCD is a square. ABE is an isosceles triangle.  $\angle AED = 55^\circ$  and  $\angle ADE = 17^\circ$ . Find  $\angle y$ .

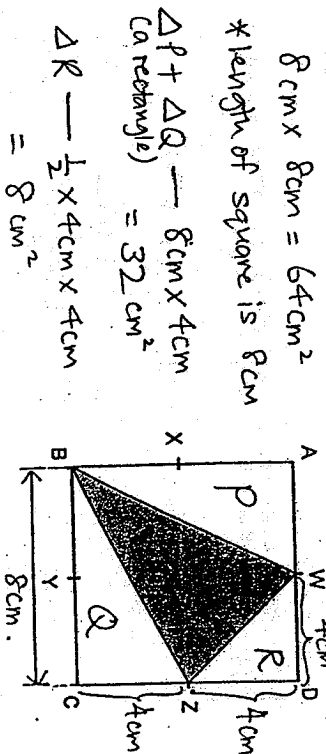


$$\angle AED = 180^\circ - 55^\circ - 90^\circ - 17^\circ = 18^\circ$$

$$\angle y = 180^\circ - 55^\circ - 55^\circ - 18^\circ = 52^\circ$$

Ans: 52

28. W, X, Y and Z are the mid-points of the sides of a square ABCD. The area of the square is  $64 \text{ cm}^2$ . What is the area of the shaded triangle?



$$8 \text{ cm} \times 8 \text{ cm} = 64 \text{ cm}^2$$

\* length of square is 8 cm

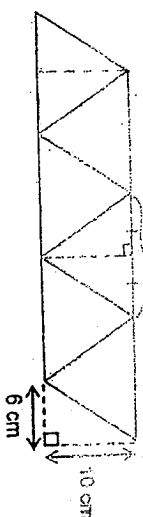
$$\Delta P + \Delta Q = 8 \text{ cm} \times 4 \text{ cm} \text{ (rectangle)} = 32 \text{ cm}^2$$

$$\Delta R = \frac{1}{2} \times 4 \text{ cm} \times 4 \text{ cm} = 8 \text{ cm}^2$$

$$\text{Shaded area} = 64 \text{ cm}^2 - 32 \text{ cm}^2 - 8 \text{ cm}^2 = 24 \text{ cm}^2$$

Ans: 24  $\text{cm}^2$

29. The figure below is made up of 6 equilateral triangles. Find the total area of the figure. (4 marks)

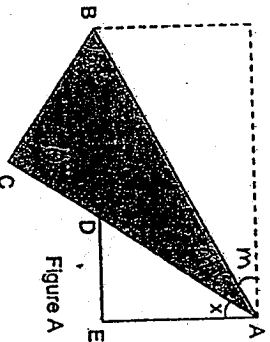


$$\frac{1}{2} \times 12 \text{ cm} \times 10 \text{ cm} = 60 \text{ cm}^2$$

$$60 \text{ cm}^2 \times 6 = 360 \text{ cm}^2$$

Ans: 360  $\text{cm}^2$

30. Sarah folded a rectangular piece of paper, coloured on one side, to form Triangle ABC and Triangle ADE. Find  $\angle x$ .



$$\angle m = 180^\circ - 90^\circ - 58^\circ = 32^\circ$$

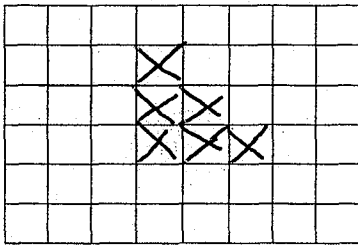
$$\angle x = 90^\circ - 32^\circ - 32^\circ = 26^\circ$$

Ans: 26

SCHOOL : ROSYTH PRIMARY SCHOOL  
 LEVEL : PRIMARY 5  
 SUBJECT : MATH  
 TERM : 2018 SA2

**PAPER 2**

Q1)



Q2)

8km = 8000m  
 400m → 25 cents  
 $8000m \rightarrow 8000 \div 400 = 20$   
 $20 \times 25 = 500$   
 500 cents = \$5  
 $\$5 + \$3.50 = \$8.50$

Q3)

| 1 <sup>st</sup> card | 2 <sup>nd</sup> card | 3 <sup>rd</sup> card |
|----------------------|----------------------|----------------------|
| 12                   | 4                    | 6                    |
| 24 = 1 x 24          | 48 = 1 x 48          | 72 = 1 x 72          |
| 2 x 12               | 2 x 24               | 2 x 36               |
| 3 x 8                | 3 x 16               | 3 x 24               |
| 4 x 6                | 4 x 12               | 4 x 18               |
|                      | 6 x 8                | 6 x 12               |
|                      |                      | 8 x 9                |
| 12 x 4 x 6 = 288     |                      |                      |

Q4)

74 x 5 = 370  
 $82 + 96 + 60 + 70 = 308$   
 $370 - 308 = 62$

Q5)

False  
 Not

Q6)

2/7 (cookies)  
 $1 - 2/7 = 5/7$  (Puffs)  
 $1/4 \times 2/7 = 1/14$  (cookies left)  
 $5/6 \times 5/7 = 25/42$  (puffs left)  
 $3/24 + 25/42 = 28/42$   
 $28/42 \rightarrow 64$

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | $14/42 \rightarrow 64 \div 2 = 32$<br>$42/42 \rightarrow 32 \times 3 = 96$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Q7)  | $\angle EAB = 60^\circ - 34^\circ = 26^\circ$<br>$\angle FBA = 60^\circ - 28^\circ = 32^\circ$<br>$32^\circ + 26^\circ = 58^\circ$<br>$\angle AFB = 180^\circ - 58^\circ = 122^\circ$                                                                                                                                                                                                                                                                                                                                                                                               |
| Q8)  | a) $200 + 52 = 252$<br>b) $4u = 252$<br>$1u = 252 \div 4 = 63$<br>$5u = 63 \times 5 = 315$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Q9)  | $5.7 \text{ kg} = 5700\text{g}$<br>$6\text{kg} = 6000\text{g}$<br>$6000\text{g} + 5700\text{g} + 340\text{g} = 1240\text{g}$<br>$1240\text{g} \div 2 = 6020\text{g}$<br>$6020\text{g} = 6.02\text{kg}$                                                                                                                                                                                                                                                                                                                                                                              |
| Q10) | Area of $\frac{1}{2}$ the rectangle $\rightarrow 78\text{cm}^2 \times 2 = 192 \text{ cm}^2$<br>Area of rectangle $\rightarrow 96\text{cm}^2 \times 2 = 192$<br>Breadth of rectangle $\rightarrow 192\text{cm}^2 \div 6 = 12\text{cm}$<br>Area of $\triangle ABC \rightarrow \frac{1}{2} \times 16\text{cm} \times 12\text{cm} = 96\text{cm}^2$<br>Area of $\triangle ADY \rightarrow \frac{1}{2} \times 16\text{cm} \times 4\text{cm} = 53\text{cm}^2$<br>Area of shaded $\triangle ACY \rightarrow 192\text{cm}^2 - 96\text{cm}^2 - 32\text{cm}^2 - 18\text{cm}^2 = 46\text{cm}^2$ |
| Q11) | a) $35 \times 20 \times 40 = 28000$<br>$28000 \div 5 = 5600$<br>$5600 \times 2 = 11200 \text{ ml}$<br>b) $11200 \div 400 = 28$ such cups                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Q12) | a) $240 \div 3 = 80$<br>b) $80 \div 3 = 26 \frac{2}{3}$<br>$26 \times 1 = 26$<br>$80 + 26 = 106$<br>$106 \times 12 = 1272$<br>$1272 \div 9 = 141 \frac{1}{3}$<br>$141 + 1 = 142$                                                                                                                                                                                                                                                                                                                                                                                                    |
| Q13) | $46 - 22 = 24$<br>$24 + 24 = 48$<br>$28 - 22 = 6$<br>$48 \div 6 = 8$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Q14) | a) $60 \times 4 - 240$<br>$60 \div 5 = 12$<br>$12 \times 2 = 24$<br>$240 - 24 = 216$<br>b) $216 \times 0.50 = 108$                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|      |                                                                                                                                                                       |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | $108 - 96 = 12$<br>$12 \div 0.40 = 30$<br>$216 - 30 = 186$                                                                                                            |
| Q15) | a) $18.90 + 0.36 \times 3 = 19.98$<br>$9.18 \times 2 = 18.36$<br>$19.98 + 18.36 = \$38.34$<br>b) $38.34 \div 100 = 0.3834$<br>$0.3834 \times 107 \approx \$41$        |
| Q16) | a) $238 \text{ min} - 100 \text{ min} = 138 \text{ min}$<br>$\$0.15 \times 138 = \$20.70$<br>b) $\$25.50 \div \$8.50 = 3$<br>$1\text{GB} + 3 \text{ GB} = 4\text{GB}$ |
| Q17) | a) $32 + 20 = 52$<br>$52 + 20 = 72$<br>b) $52 \times 2 = 104$<br>$104 + 36 = 140$<br>$140 \div 2 = 70$<br>$70 \times 5 = 350$<br>$52 + 20 = 72$<br>$350 \div 7 = 50$  |

