Semestral Assessment 2 2016
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 -_____

Date: 27 Oct 2016 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(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 6 printed 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.

(20 marks)

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1. In 963 218, the value of the digit 6 is _____ .

   (1) 600
   (2) 6 000
   (3) 60 000
   (4) 600 000

2. Which of the following numbers is 800 000 when rounded off to the nearest thousand?

   (1) 802 849
   (2) 800 632
   (3) 799 531
   (4) 799 488

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

   (1) 10
   (2) 13
   (3) 3
   (4) 30

4. What is the value of 2 hundreds, 5 tenths and 8 thousandths?

   (1) 250.008
   (2) 200.580
   (3) 200.508
   (4) 200.058

(Go on to the next page)

5. The number of watermelons is $\frac{1}{2}$ the number of durians. The number of jackfruits is four times that of watermelons. What is the ratio of the number of durians to the total number of fruits?

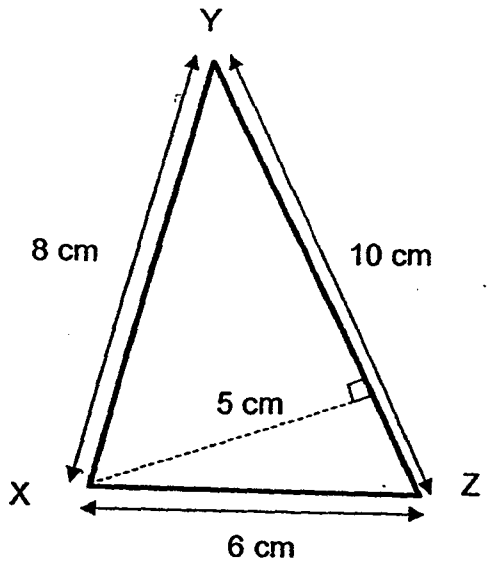
(1) 1 : 11

(2) 11 : 1

(3) 2 : 7

(4) 7 : 2

6. What is the area of triangle XYZ as shown in the figure?



(1) 15 cm^2

(2) 24 cm^2

(3) 25 cm^2

(4) 30 cm^2

Find the value of 48 + 96 ÷ 4 – 2 x 16.

(1) 40

(2) 544

(3) 1120

(4) 4

(Go on to the next page)

8. $0.25 \times 300 =$ _____

(1) 0.75

(2) 7.5

(3) 75

(4) 7500

9. The sum of 4 numbers is 1080. One of the numbers is 150. What is the average of the other 3 numbers?

(1) 50

(2) 270

(3) 310

(4) 930

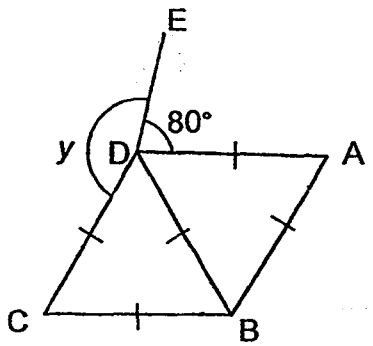
10. In the figure below, ABD and CDB are equilateral triangles and $\angle ADE = 80°$ Find $\angle y$.

(1) 100°

(2) 160°

(3) 220°

(4) 280°



11. The ratio of the length of a stick to the length of a ruler is 3 : 4. The length of the ruler is 16 cm. Find the length of the stick.

(1) 12 cm

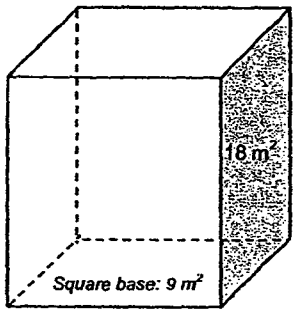
(2) 16 cm

(3) 3 cm

(4) 4 cm

(Go on to the next page)

12. The figure below shows a cuboid with a square base of area 9 m^2.
The area of the shaded face is 18 m^2. What is the height of the cuboid?



(1) 6 m

(2) 2 m

(3) 3 m

(4) 9 m

13. At a family day, $\frac{5}{9}$ of the participants are adults and the rest are children. $\frac{1}{4}$ of the children are boys. What fraction of the participants are girls?

(1) $\frac{11}{36}$

(2) $\frac{7}{36}$

(3) $\frac{1}{9}$

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

(Go on to the next page)

14. Sheila bought 10 m of cloth. She used $\frac{1}{5}$ of it to make some bibs and $3\frac{1}{2}$ m to make a table cloth. How much cloth was she left with?

(1) $3\frac{7}{10}$ m

(2) $4\frac{1}{2}$ m

(3) $5\frac{1}{2}$ m

(4) $6\frac{3}{10}$ m

15. Alynna had 60 red stickers and 40 green stickers. Alynna gave away 30% of her red stickers and 55% of her green stickers. What percentage of her stickers left was green?

(1) 70%
(2) 60%
(3) 45%
(4) 30%

(Go on to Booklet B)

Semestral Assessment 2
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 -_____

Date: 27 Oct 2016 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(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. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

*** This booklet consists of 8 printed pages (including this cover 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

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

16. List any 2 common factors of 9 and 27.

Ans: _____

17. Find the equivalent ratio.

36 : _____ = 81 : 45

Ans: _____

18. Find the value of $\frac{4}{5} \div 20$.

Give your answer as a fraction in the simplest form.

Ans: _____

(Go on to the next page)

19. $15.75 \times 4 = 63$

$1.575 \times \square = 63$

What is the missing number?

Ans: _____

Do not write in this space

20. Express 45% as a fraction in its simplest form.

Ans: _____

21. A wholesaler receives a shipment of 6500 plastic files. He wants to pack them into boxes. Each box can contain 30 files. What is the least number of boxes that he needs to pack all the files?

Ans: _____

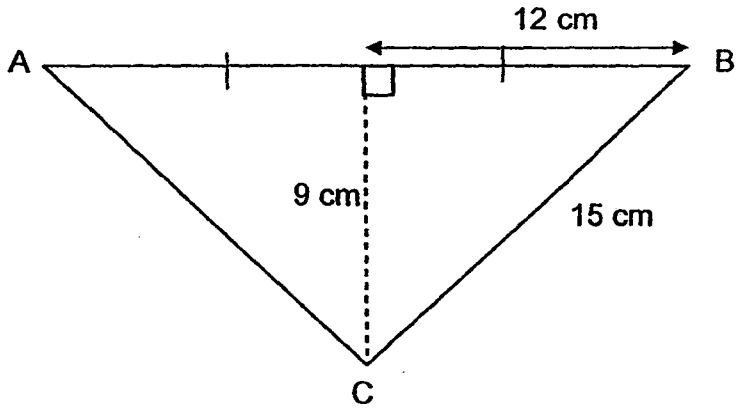
(Go on to the next page)

22. There are 22 pupils in the Swimming Club. Given that there are 6 more boys than girls, what is the ratio of the number of girls to the number of boys? Give your answer in the simplest form.

Do not write in this space

Ans: _____

23. Find the area of triangle ABC below.

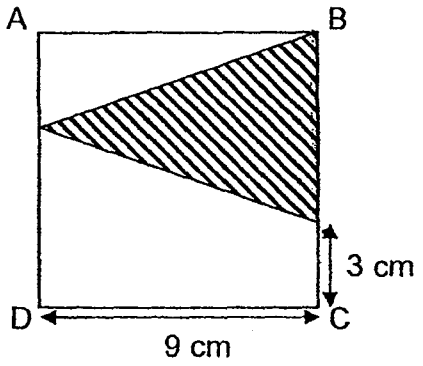


Ans: _____ cm^2

(Go on to the next page)

24. In the figure below, ABCD is a square. Find the area of the shaded triangle.

Do not write in this space



Ans: _____ cm^2

25. Belle walked a total of 6 180 steps for 5 days. What was the average number of steps she took per day?

Ans: _____

.. (Go on to the next page)

Questions **26** 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.

(10 marks)

Do not write in this space

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

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26. Charlene has 6 bottles of apple juice. Each bottle contains 330 mℓ of ~~water~~ apple. What is the total volume of the apple juice that Charlene has? Express your answer in litres.

Ans: _____ ℓ

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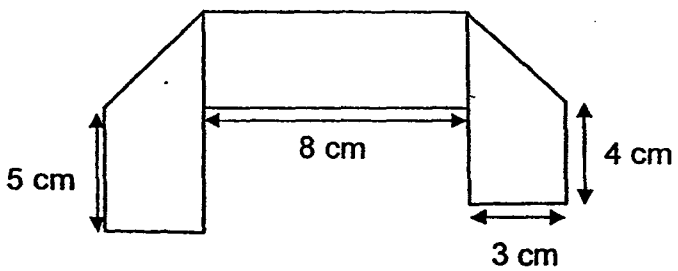
27. The figure below is not drawn to scale. A rectangular piece of paper is folded to form the figure as shown below. Find the area of the rectangular piece of paper before it was folded.



Ans: _____ cm^2

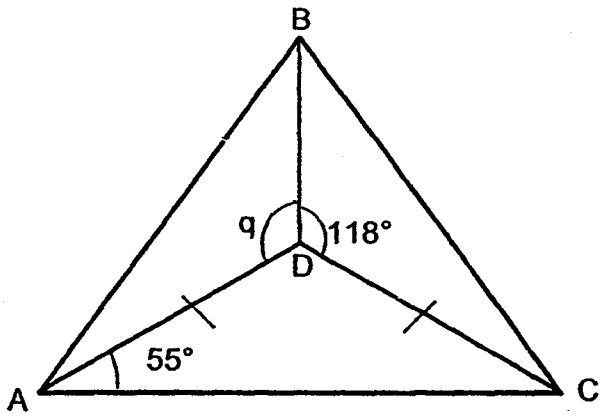
(Go on to the next page)

28. The price of a pen before 7% GST is $3. Elyn bought 5 identical pens. How much did she have to pay for the 5 pens inclusive of GST?

Do not write in this space

Ans: $ _____

29. In the figure below, ABC is a triangle.
AD = DC, ∠BDC = 118°. Find the ∠q.

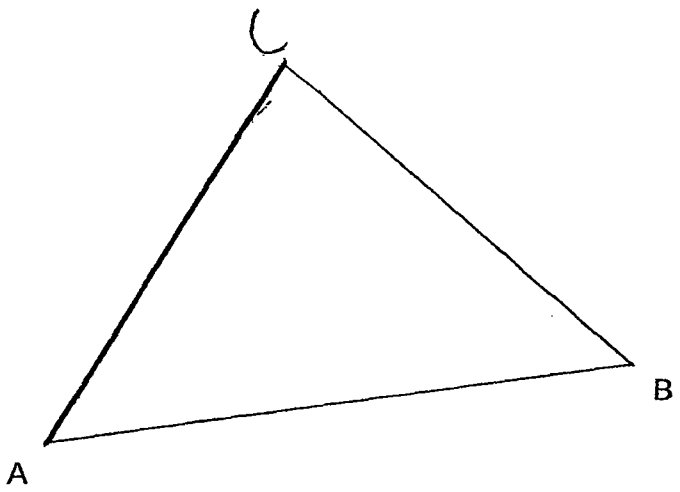


Ans: _____ °

(Go on to the next page)

30. Given AB = 8 cm, construct Triangle ABC such that AC = 6 cm and ∠ CAB = 50°. Label your diagram clearly.

Do not write in this space



End of paper. Have you checked your work?

Semestral Assessment 2016
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 27 Oct 2016 Parent's Signature: _____

Time: 1h 40min

PAPER 2

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 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

*** This booklet consists of 15 printed 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.

(10 marks)

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

Do not write in this space

1. Peter has 40 pieces of wire. Each piece is $\frac{6}{7}$ m long. Find the total length of 40 pieces of wire. Express your answer as a fraction in the simplest form.

Ans: _____ m

2. Mary bought a roll of ribbon. She used $\frac{1}{4}$ of the ribbon to decorate her room. She had $\frac{2}{3}$ m of her ribbon left. Find the length of the ribbon that she bought. Express your answer as a fraction in the simplest form.

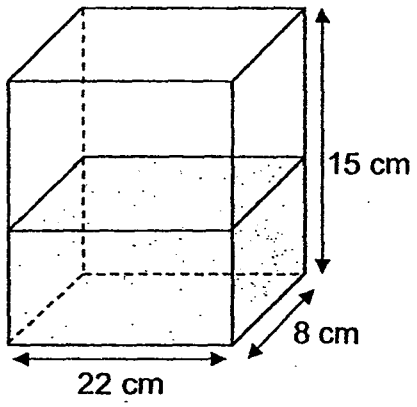
Ans: _____ m

(Go on to the next page)

Do not write in this space

3. A rectangular fish tank is $\frac{1}{3}$ filled with water.

The dimensions of the tank are 22 cm by 8 cm by 15 cm. How many more litres of water is needed to fill up the fish tank completely?



Ans: _____ *l*

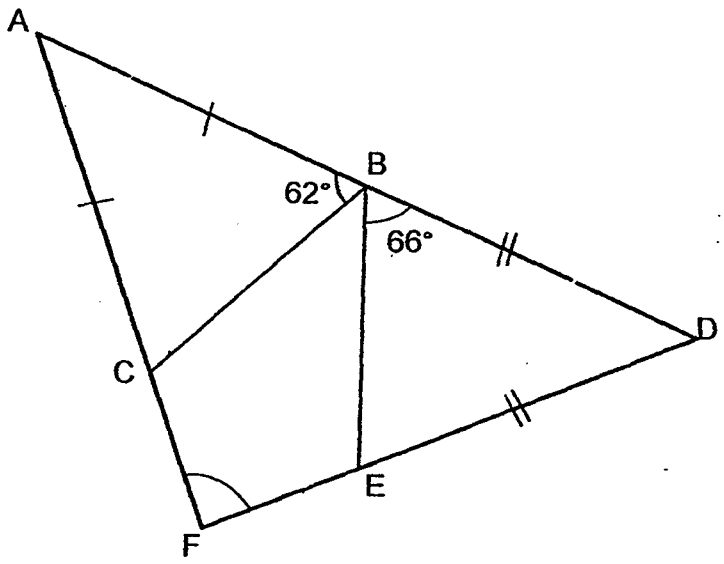
4. In order to get a prize, a pupil must score an average of 89 or more for 3 tests. Kishan scores 86 and 90 for the first 2 tests.
What is the lowest score he needs to get in the third test in order to get a prize?

Ans: _____

(Go on to the next page)

5. In the diagram below, ABC and BDE are isosceles triangles. AB = AC and BD = DE. AFD is a triangle. Find ∠ AFD.

Do not write in this space



Ans: _____ °

(Go on to the next page)

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. 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.

(50 marks)

Do not write in this space

6. Siti paid $156 for 3 books and 4 files. One book cost twice as much as a file. How much is the total cost of 4 files?

Ans: _____ [3]

7. David gave 35% of his salary to his wife. He spent 25% of it and saved the remaining $800. How much did he spend?

Ans: _____ [3]

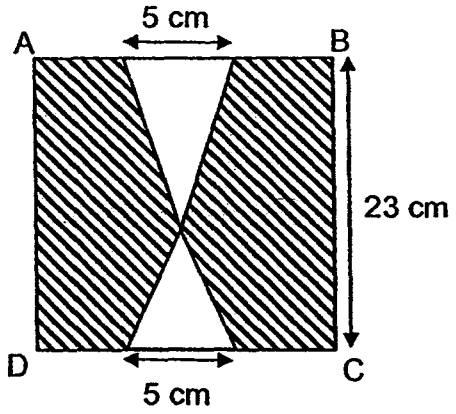
(Go on to the next page)

8. Azul has a number of $2 and $5 notes in the ratio of 7 : 4. The total value of all the notes is $306. How many $5 notes does Azul have?

Do not write in this space

Ans: _____ [3]

9. In the figure below, ABCD is a square of side 23 cm. Find the total area of the shaded parts.



Ans: _____ [3]

(Go on to the next page)

10. On a bus, $\frac{3}{4}$ of the passengers were males and the rest were females.

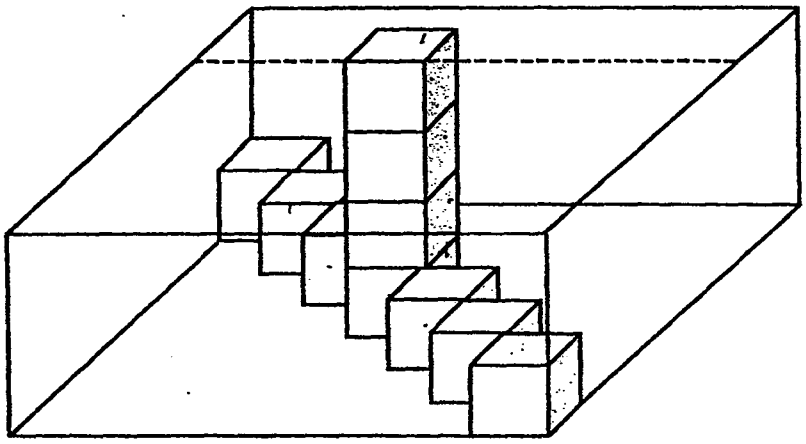
On reaching a bus stop, $\frac{2}{3}$ of the male passengers and $\frac{1}{3}$ of the female passengers alighted from the bus. There were 25 passengers remaining on the bus, how many passengers were there on the bus at first?

Do not write in this space

Ans: _____ [3]

11. Siti puts ten 1-cm cubes into a transparent tank.

Do not write in this space



(a) What is the volume of the transparent tank?

(b) How many more 1-cm cubes are needed to fill up the whole tank completely?

Ans: (a) _____ [2]

(b) _____ [1]

(Go on to the next page)

12. 400 men and women were playing Pokemon Go in a park. After an hour, $\frac{3}{4}$ of the men and 50% of the women left the park. Then, there were 80 more women than men who remained in the park. How many men were there in the park at first?

Do not write in this space

Ans: _____ [4]

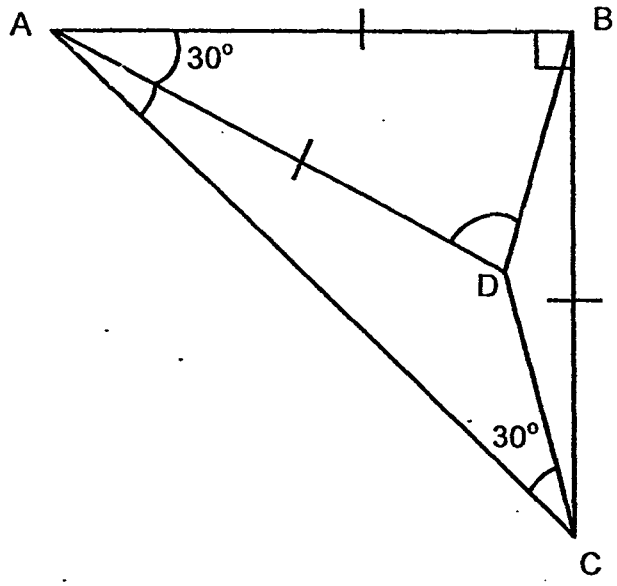
(Go on to the next page)

13. In the diagram shown below, ABC is a right-angled triangle and AB = BC = AD.

(a) Find ∠DAC

(b) Find ∠ADB

Do not write in this space



Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

14. The average cost of 3 kettles, 4 irons and an oven is $55.40. A kettle costs $8 more than an iron and $72.80 less than an oven. What is the cost of an oven?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

15. Mrs Tan packed a total of 1 078 calculators and board games into 49 boxes. The calculators and board games were packed in separate boxes. Each box could hold either 28 calculators or 7 board games only.

(a) How many board games were there in all?

(b) Mrs Tan paid a total of $15 400 for all the calculators and board games. The cost of one board game is $50. Find the total cost of the calculators.

Do not write in this space

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

16. Andy, Bala and Charlie have some cards. The number of cards Andy has is 12 more than 3 times the number of cards Bala has. The number of cards Charlie has is 24 more than $\frac{2}{3}$ of the number of cards Andy has. Andy has 16 more cards than Charlie.

Do not write in this space

(a) How many cards does Charlie have?

(b) How many cards do the 3 boys have altogether?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

17. A wooden box of unknown mass weighed 20.6 kg when loaded with 20 identical bottles. After Sumaiyah placed 8 more identical bottles and 6 more cans into the box, the total mass increased to 29.84 kg. The mass of a bottle is 385 g more than the mass of a can.

Do not write in this space

(a) What is the mass of a can?

(b) What is the mass of the wooden box?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

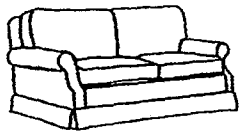
18. Kea was having a storewide discount of 10% off its usual price. Mr Lim used his credit card to purchase a sofa set and Mr Tan used cash to pay a similar sofa set.

Do not write in this space

(a) How much did Mr Lim pay in the end after GST? Round off your answer to the nearest cent.

(b) How much did Mr Tan pay in the end after GST? Round off your answer to the nearest **ten cent**.

KEA
10% Storewide Discount!



New Sofa Set!
Usual Price: $1 599
Further discount:

Pay by Credit Card: 10% off discounted price before GST!

Pay by cash: $100 off discounted price before GST!

Mr Lim's torn receipt

KEA
Receipt
Sofa Set
Storewide discount (10%)
Payable
Credit card discount (10%)
Price without GST
7% GST
Total Payable
==========

Ans: (a) _____ [3]

(b) _____ [2]

End of Paper

ANSWER KEY

YEAR : 2016
LEVEL : PRIMARY 5
SCHOOL : ROSYTH
SUBJECT : MATHEMATICS
TERM : SA2

Paper 1

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

Q16 1, 3

Q17 20

Q18 $\frac{1}{25}$

Q19 40

Q20 $\frac{9}{20}$

Q21 217

Q22 4 : 7

Q23 108 cm^2

Q24 27 cm^2

Q25 1236

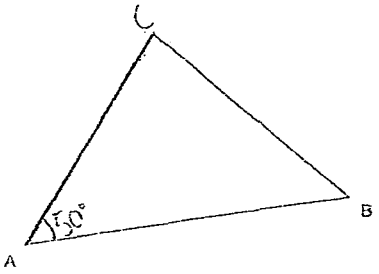
Q26 1.98 ℓ

Q27 69 cm^2

Q28 $16.05

Q29 172°

Q30



Paper 2

Q1 $34\frac{2}{7}$ m

Q2 $\frac{2}{3} \div 3 = \frac{2}{9}$
$\frac{2}{9} \times 4 \Rightarrow \frac{8}{9}$ m

Q3 Volume of tank → 22 x 8 x 15 = 2640
Amount not filled → $\frac{2640}{3} \times 2 = 1760 \approx$ 1.76 ℓ

Q4 Total to get a prize → 89 x 3 = 267
Total for 2 tests → 86 + 90 = 176
Total for 3rd test → 267 + 176 ⇒ 91 marks

Q5 180° - 56° - 48° ⇒ 76°

Q6 3b → 2 x 3 = 6
4f → 1 x 4 = 4
1u → 156 ÷ (6 + 4) = 15.6
4f → 15.6 x 4 ⇒ $62.40

Q7 Total given/spent → 35 + 25 = 60
Left → 100 – 60 = 40
40 % → 800
1 % → 800 ÷ 40 = 20
Spent → 25 %
Amt spent → 20 x 25 ⇒ $500

Q8 Value of 1 set → (2 x 7) + (4 x 5) = 34
No. of sets → 306 ÷ 34 = 9
Number of 5 → 9 x 4 ⇒ 36

Q9 $471.5\ cm^2$

Q10
$3 + 2 = 5$
$5u \rightarrow 25$
$1u \rightarrow 25 \div 5 = 5$
Total $u \rightarrow 12$
$12 \times 5 \Rightarrow$ 60 passengers

Q11a $196\ cm^3$

Q11b
Total volume $\rightarrow 7 \times 7 \times 4 = 196$
$196 - 10 \Rightarrow$ 186 cubes

Q12
$6u \rightarrow 400 - 160 = 240$
$1u \rightarrow 240 \div 6 = 40$
$4u \rightarrow 4 \times 40 \Rightarrow$ 160 men

Q13a 15°

Q13b 75°

Q14
Total cost $\rightarrow 55.4 \times 8 = 443.2$
$8u \rightarrow 443.2 - (8 \times 4) - 72.8 = 338.4$
$1u \rightarrow 338.4 \div 8 = 42.3$
Oven $\rightarrow 42.3 + 8 + 72.8 \Rightarrow$ $123.10

Q15a
No. of C $\rightarrow 49 + 28 = 1372$
Diff $\rightarrow 1372 - 1078 = 294$
Diff in 1 box $\rightarrow 28 - 7 = 21$
No. of boxes $\rightarrow 294 \div 21 = 14$
$14 \times 7 =$ 98 board games

Q15b
$14 \times 50 = 700$
$15400 - 700 = 14700$
Total of board games $\rightarrow 98 \times 50 = 4900$
$15400 - 4900 \Rightarrow$ $10500

Q16a
$1u \rightarrow 24 + 16 = 40$
C $\rightarrow 40 \times 2 + 24 \Rightarrow$ 104 cards

Q16b
$3p \rightarrow 120 - 12$
$1p \rightarrow 108 \div 3 = 36$
$120 + 104 + 36 \Rightarrow$ 260 cards

Q17a Mass 8b & 6c → 29.84 – 20.6 = 9.24
14c → 92.40 – 385 x 8 = 6160
1c → 616 ÷ 14 ⇒ <u>440 kg</u>

Q17b Mass 1b → 385 + 440 = 825
20b → 825 x 20 = 16500
20600 – 16500 ⇒ <u>4100 g</u>

Q18a $1385.85

Q18b $1432.80

End