



Rosyth School
Second Semestral Assessment 2015
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr. 5 - _____

Date: 30th October 2015 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 of 7 pages (including this cover page)

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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. All diagrams are not drawn to scale unless stated otherwise.

(20 marks)

1. 7 hundred thousands + 3 hundreds + 50 ones = _____

(1) 7305

(2) 7350

(3) 700 305

(4) 700 350

2. Round off 23 714 to the nearest thousand:

(1) 20 000

(2) 23 000

(3) 23 700

(4) 24 000

3. What is the difference between 3 tenths and 20.45?

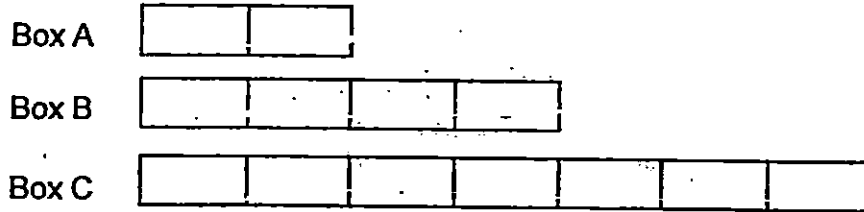
(1) 10.45

(2) 17.45

(3) 20.15

(4) 20.75

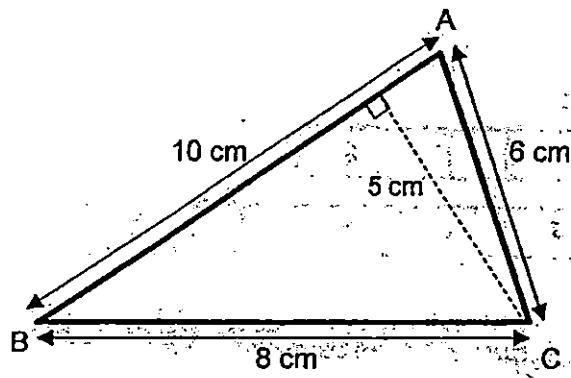
4. The following model represents the number of marbles in 3 boxes, A, B, and C.



What is the ratio of the number of marbles in Box C to the total number of marbles in Box A and Box B?

- (1) 6 : 7
- (2) 7 : 6
- (3) 7 : 13
- (4) 13 : 7
5. Amos sat for 3 tests. He scored 90 marks for one test. He scored a total of 90 marks for the other 2 tests. What was the average mark of the 3 tests?
- (1) 30
- (2) 45
- (3) 60
- (4) 90
6. Which one of the following is not equivalent to $1\frac{1}{5}$?
- (1) 1.15
- (2) 1.2
- (3) $\frac{6}{5}$
- (4) $\frac{12}{10}$

7. What is the area of triangle ABC as shown in the figure?



- (1) 20 cm^2
- (2) 25 cm^2
- (3) 30 cm^2
- (4) 40 cm^2

8. The ratio of number of roses to the number of lilies in a flower shop is 8 : 5. There are 40 lilies. How many more roses than lilies are there?

- (1) 8
- (2) 15
- (3) 24
- (4) 64

9. Jude is facing east. If he turns 135° anticlockwise, which direction will he be facing?

- (1) North-west
- (2) North-east
- (3) South-west
- (4) South-east

10. Dave used $\frac{3}{8}$ m of wire to make 5 identical triangles. What is the perimeter of each triangle?

- (1) $\frac{3}{40}$ m
- (2) $\frac{8}{15}$ m
- (3) $1\frac{7}{8}$ m
- (4) $13\frac{1}{3}$ m

11. Alan and Jared collect seashells. The average number of seashells each boy has is 250. Alan has 40 seashells more than Jared. How many seashells does Jared have?

- (1) 55
- (2) 230
- (3) 270
- (4) 290

12. A baker baked some bread. He sold $\frac{2}{5}$ of them in the morning and another $\frac{1}{3}$ in the afternoon. Then he had 28 loaves left. How many loaves of bread did he bake?

- (1) 30
- (2) 39
- (3) 70
- (4) 105

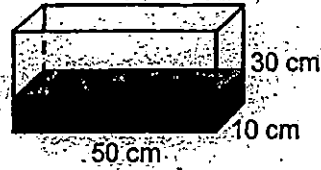
13. The table below shows the charges for bicycle rental.

Bicycle For Rental	
For the first hour	\$3
For every additional $\frac{1}{2}$ hour	\$1.20

Lynn rented a bicycle from 9.30 am to 12 noon. How much did she pay?

- (1) \$4.20
- (2) \$6.60
- (3) \$7.20
- (4) \$9

14. A container, 50 cm by 10 cm by 30 cm, is $\frac{1}{3}$ filled with water. How much more water is needed to fill up the container to the brim?



- (1) 20 cm^3
- (2) 5000 cm^3
- (3) $10\,000 \text{ cm}^3$
- (4) $15\,000 \text{ cm}^3$
15. Hassim had \$80. He spent 50% of his money on a watch and 30% of the remainder on a book. How much money was left?

- (1) \$8
- (2) \$12
- (3) \$16
- (4) \$28

— Proceed to Booklet B



Rosyth School
Second Semestral Assessment 2015
Primary 5 Mathematics

Name: _____ Register No.: _____

Class: Pr 5 - _____

Date: 30th October 2015

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 6 pages (including this cover page)

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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. All diagrams are not drawn to scale unless stated otherwise.

Do not write in this space.

(10 marks)

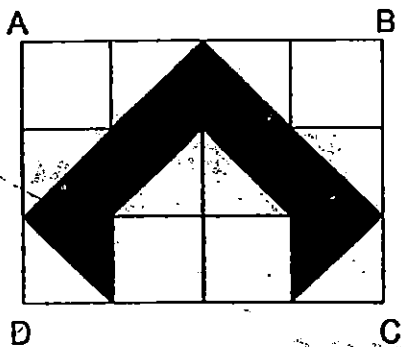
16. Find the value of 60.3×70 .

Ans: _____

17. Find the value of $30 - (6 \times 3) \div 9 + 9$.

Ans: _____

18. In the figure below, ABCD is made up of squares. What fraction of ABCD is shaded? Leave your answer in its simplest form.



Ans: _____

19. Express $5\frac{3}{7}$ as a decimal correct to 1 decimal place.

Do not
write in
this space.

Ans: _____

20. Express $\frac{3}{8}$ as a percentage.

_____ %

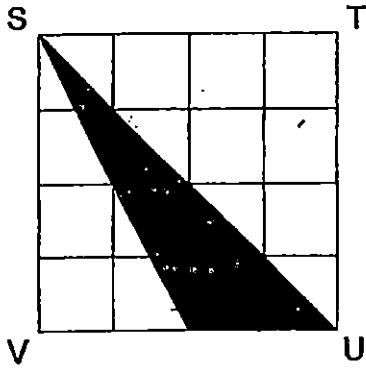
21. Ali, Sharon and Leah shared a sum of money in the ratio of 5 : 4 : 7. Leah's share was \$60 more than Sharon's. How much was Ali's share?

Ans: \$ _____

22. There were 20 girls and 17 boys in an Art Club. This month, 4 girls joined the club and 3 boys left the club. What is the ratio of the number of boys to the number of girls in the Art Club now? Leave your answer in the simplest form.

Ans: _____

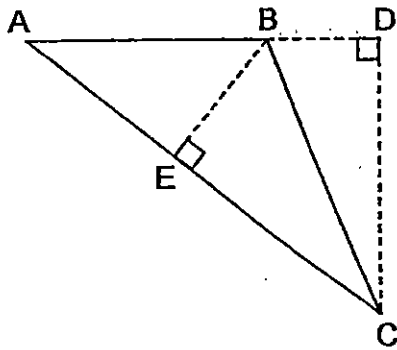
23. What fraction of the square STUV is unshaded? Leave your answer in its simplest form.



Do not write in this space.

Ans: _____

24. Write down the base and height of Triangle ABC.



Ans: Base _____

Height _____

25. Alex cycled a distance of 160 km in 5 days. What was the average distance he cycled per day?

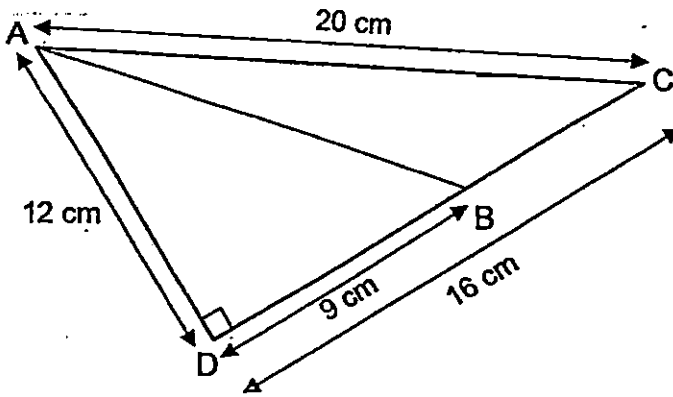
Ans: _____ km

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. All diagrams are not drawn to scale unless stated otherwise.

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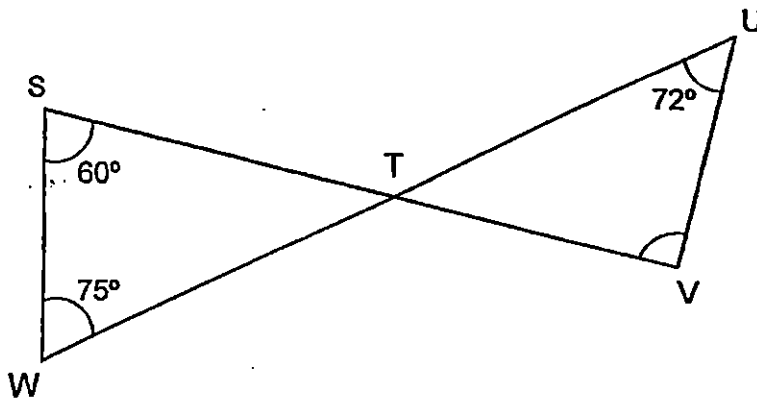
(10 marks)

26. In the figure below, what is the area of triangle ABC?



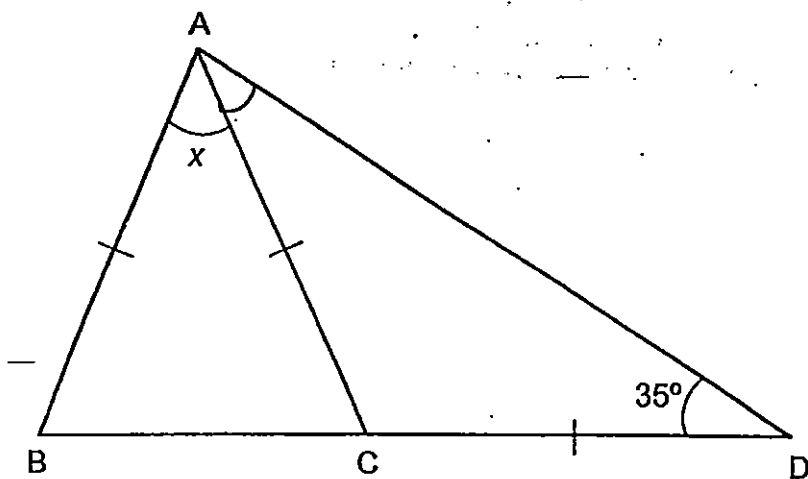
Ans: _____ cm²

27. The figure below is made up of triangles STW and TUV. STV and WTU are straight lines. Find $\angle UVT$.



Ans: _____ °

28. In the diagram below, ABC and ACD are isosceles triangles. Find $\angle x$.



Ans: _____ °

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write in
this space.

29. Joan spent an equal amount of money each day from Monday to Wednesday. She spent a total of \$15. On Thursday and Friday, she spent \$5.50 each day. Find the percentage increase in the amount spent on Thursday as compared to Wednesday.

Ans: _____ %

30. Joe placed 10 potted plants in a row at equal distances apart. The distance between the first and the fifth potted plant was 25.2 m. Find the distance between the first and the last potted plant.

Ans: _____ m

End of paper. Have you checked your work?



Rosyth School
Semestral Assessment 2 2015
Primary 5 Mathematics

Name: _____

Register No. _____

Class: Pr 5 - _____

Date: 30 October 2015

Time: 1 h 40 mins

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 18 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)

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in this space

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

1. For every \$15 Wei Hong saved, his mother gave him \$3. At the end of the year, Wei Hong had a total of \$828. How much money did he save?

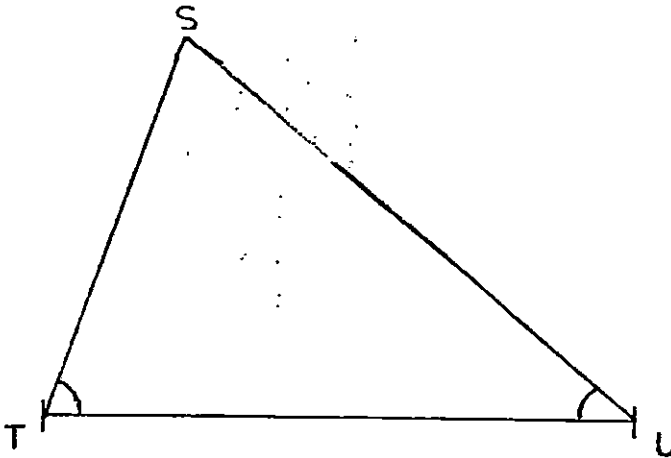
Ans: \$ _____

2. Mr Harris bought 20 belts. He sold 12 of them at \$8 each and the rest at \$6 each. What was the average price of the 20 belts?

Ans: \$ _____

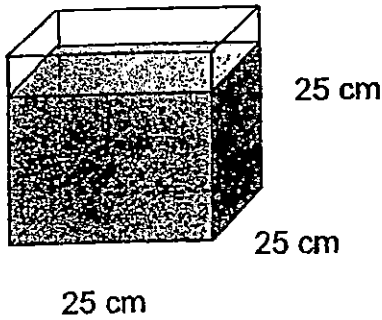
- 3 Given $TU = 8$ cm, construct Triangle STU such that $\angle STU = 70^\circ$ and $\angle TUS = 40^\circ$. Label your diagram clearly.

Do not write
in this space

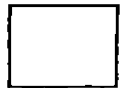


4. A cubical container of edge 25 cm was filled to the brim at first. Some water was drained away from the container and resulted in a 6 cm drop in the water level as shown in the diagram below. Find the amount of water left in the container. Leave your answer in litres and millimetres.

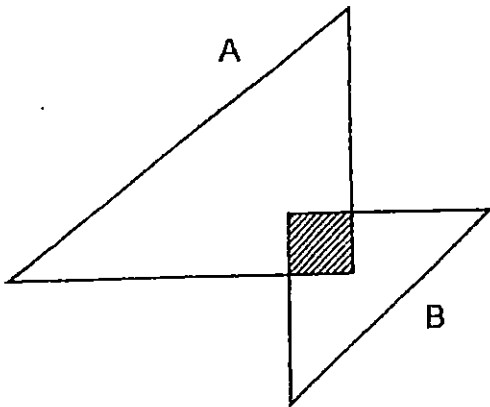
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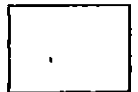
Ans: _____ ml



5. The figure below consists of 2 triangles A and B whose areas are in the ratio of 3 : 1. Given that $\frac{1}{12}$ of triangle A is shaded, what is the ratio of the shaded area to the unshaded area of the figure?



Ans: _____

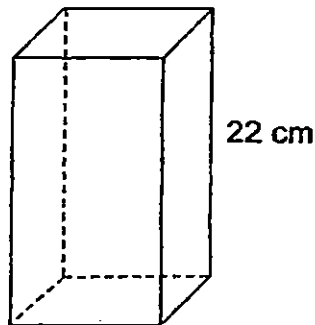


For Questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets () at the end of each question or part-question. For questions which require units, give your answers in the units stated.

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in this space.

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

6. The figure below shows a cuboid with a square base which has a perimeter of 64 cm. Find the volume of the cuboid.



Ans: _____ [3]



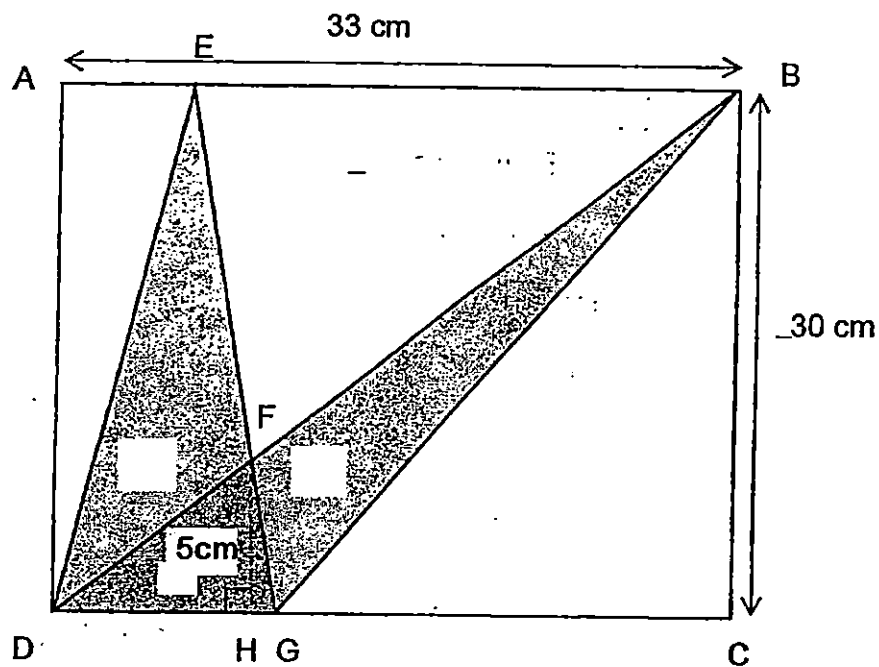
7. May, Ellen and Joel have a total of 475 playing cards. May has 55 playing cards more than Ellen. Ellen has twice as many playing cards as Joel. How many playing cards does May have?

Do not write
in this space

Ans: _____ [3]

8. ABCD is a rectangle measuring 33 cm by 30 cm. The length of FH is 5 cm. Given that the length of DG is $\frac{1}{2}$ of GC, find the shaded area.

Do not write in this space



Ans. _____ [3]



9. Ethan is $\frac{1}{3}$ as old as his aunt 10 years ago, the ratio of Ethan's age to his aunt's age was 1 : 7. How old is Ethan now?

Do not write
in this space

Ans: _____ [3]

10. Ali spent 40% of his monthly income and saved the rest. If he spent 25% of his income, his savings increased by \$840. How much is his monthly income?

Do not write
in this space

Ans: _____ [3]

11. Iman and Yuven had some marbles. After Iman and Yuven gave away the same number of marbles, Iman had $\frac{3}{4}$ of his marbles left while Yuven had $\frac{1}{3}$ of his marbles left. Both of them had 385 marbles in the end. How many marbles were given away altogether?

Do not write
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Ans: _____ [3]

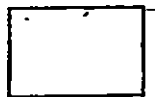
12. Arif, Bee Leng, Chandra and Don donated some books for charity. Arif donated $\frac{1}{4}$ of the number donated by Bee Leng, Chandra and Don. The ratio of the number of books donated by Bee Leng to the number of books donated by Chandra and Don was 3 : 5. The ratio of the number of books donated by Chandra to the number of books donated by Don was 3 : 7. Arif donated 8 books more than Chandra.

- (a) What was the total number of books donated by the 4 children?
- (b) How many books must Don give to Chandra so they would have the same number of books?

Do not write
in this space

Ans: (a) _____ [3]

(b) _____ [2]



13. A bag cost \$25 more than a cap and \$13 more than a shirt. Kelly bought a bag, 2 caps and 4 shirts. She paid a total of \$213.

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(a) How much did the bag cost?

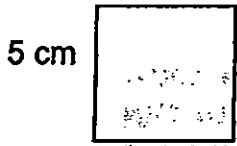
(b) Kelly bought 3 more caps at half price each. What is the total amount she had to pay for all the items she bought?

Ans: (a) _____ {2}

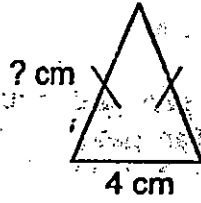
(b) _____ {2}

14. Wires are bent to form the following shapes.

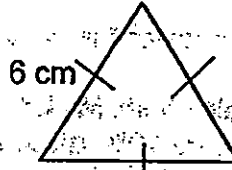
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A square



An isosceles triangle



An equilateral triangle

The average length of the wire used for each shape above is 17 cm. Find the length of a side of the isosceles triangle.

Ans: _____ [4]



15. Mr Lim sells a watch for \$280. Mr Tan also sells the same type of watch but at a price which is 25% more than Mr Lim.

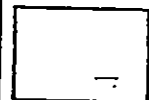
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(a) What is the price of the watch that is sold by Mr Tan?

(b) During a sale, both Mr Lim and Mr Tan gave a discount on the watch. Mr Lim gave a 12% discount while Mr Tan gave a certain percentage discount. Alice bought the watch from Mr Tan and paid \$1.40 less than the discounted price offered by Mr Lim. What was the percentage discount given by Mr Tan?

Ans: (a) _____ [2]

(b) _____ [3]



16. A bag contains a number of 20-cent coins, 50-cent coins and \$1 coins. $\frac{1}{4}$ of the coins are 20-cent coins. $\frac{2}{5}$ of the remainder are 50-cent coins and the rest are \$1 coins. The total value of the coins is \$156.

- (a) What fraction of the coins are \$1 coins?
- (b) How many coins are there altogether?

Do not write
in this space

Ans: (a) _____ [1]

(b) _____ [4]

17. Mrs Lew ordered 82 popsicles to be shared equally by 41 students in her class. All the boys were present but some girls were not in school that day due to a dance competition. After giving each student who was in class one extra popsicle each, Mrs Lew still had 1 popsicle left.

Do not write
in this space

(a) How many girls were not in school?

(b) There were twice as many boys as girls who turned up in her class that day. What was the total number of girls in Mrs Lew's class?

Ans: (a) _____ [2]

(b) _____ [2]

18. The figures below are made up of rectangles and stars.
Study the figures and table below carefully and answer the questions.

Do not write
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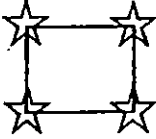


Figure 1

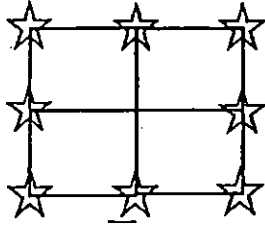


Figure 2

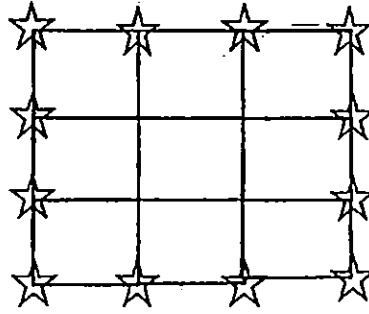


Figure 3

Figure Number	1	2	3	4	15
Number of stars	4	8	12	(a)
Number of rectangles	1	4	9	(b)

(a) How many stars are there in Figure 4?

(b) How many rectangles are there in Figure 15?

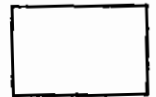
(c) How many stars are there in the figure that has 729 rectangles?

Do not write
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Ans : (a) _____ [1]

(b) _____ [1]

(c) _____ [3]



End of Paper
Please check your workings thoroughly!



SCHOOL : ROSYTH SCHOOL
SUBJECT : MATHEMATICS
TERM : SA2

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

Q16. 4221

Q17 $37 \rightarrow 30 - 18 \div 9 + 9, 30 - 2 + 9, 28 + 9 = 37$

Q18. $\frac{1}{3} \rightarrow \frac{4}{12} = \frac{1}{3}$

Q19. $5.4 \rightarrow 5\frac{3}{7} = \frac{38}{7}$

Q20. $37.5\% \rightarrow \frac{3}{8} \times 100 = \frac{75}{2} = 37.5\%$

Q21. \$100 \rightarrow A:S:L, 5:4:7, $7 - 4 = 3$, $3u = 60$, $1u = 20$, $5u = 100$

Q22. $7 : 12 \rightarrow 20 + 4 = 24$, $17 - 3 = 14$, $24 : 14$, $12 : 7$

Q23. $\frac{3}{4} \rightarrow$ Shaded $\frac{4}{16}, \frac{16}{16} - \frac{4}{16} = \frac{12}{16}, \frac{6}{8} = \frac{3}{4}$

Q24. Base : AB, Height : DC

Q25. $32\text{km} \rightarrow 160 \div 5 = 32$

Q26. 42cm^2 Q27. 65°

Q28. 40°

Q29. $10\% \rightarrow \$15 \div 3 = \5 , $\$5 \div 100 = \0.05 , $\$0.50 \div \$0.05 = 10$

Q30. $56.7\text{m} \rightarrow 10 - 1 = 9$, $5 - 1 = 4$, $25.2 \div 4 = 6.3$, $9 \times 6.3 = 56.7$

Q1. \$690

$15 + 3 = 18$ (1 set)

$828 \div 18 = 46$ (no. of sets)

$46 \times 15 = 690$ (amount he saved)

Q2. \$7.20

$12 \times 8 = 96$

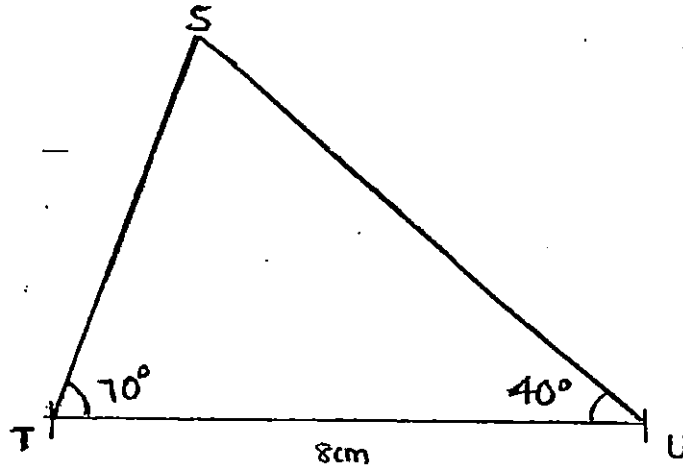
$20 - 12 = 8$ (rem b)

$8 \times 6 = 48$ (price of 6b)

$96 + 48 = 144$ (total price)

$144 \div 20 = 7.20$ (average price)

Q3. SEE PICTURE



Q4. 11 litre 875ml

$$25 \times 25 \times 25 = 15\,625 \text{ (total capacity)}$$

$$25 \times 25 \times 6 = 3\,750 \text{ (drained out)}$$

$$15\,625 - 3\,750 = 11\,875 \text{ (left)}$$

$$11\,875 \text{ cm}^3 = 11\,875 \text{ ml}$$

$$11\,875 \text{ ml} = 11 \text{ litre } 875 \text{ ml}$$

Q5. 1:14

$$A \rightarrow S:US: \text{TOTAL}, 1:11:12$$

$$B \rightarrow S:US: \text{TOTAL}, 1:3:4$$

$$\text{Unshaded area} \rightarrow 1u$$

$$\text{Unshaded area} \rightarrow 11u + 3u = 14u$$

$$S:US \rightarrow 1:14$$

Q6. $5632 \text{ cm}^3 \div 4 = 16$, $V 16 \times 16 \times 22 = 5632$

Q7. 223

$$475 - 55 = 420 \text{ (5u)}$$

$$5u \rightarrow 420$$

$$1u \rightarrow 420 \div 5 = 84$$

$$2u \rightarrow 84 \times 2 = 168$$

$$168 + 55 = 223 \text{ (m)}$$

Q8. 302.5 cm^2

$$1u + 2u = 3u \text{ (total units)}$$

$$3u \rightarrow 33$$

$$1u \rightarrow 33 \div 3 = 11 \text{ (DG)}$$

$$2u \rightarrow 11 \times 2 = 22 \text{ (GC)}$$

$$A \rightarrow \frac{1}{2} \times 11 \times 30 = 165 \text{ (including c)}$$

$$B \rightarrow \frac{1}{2} \times 11 \times 30 = 165 \text{ (including c)}$$

$$C \rightarrow \frac{1}{2} \times 11 \times 5 = 27.5$$

$$165 + 165 = 330 \text{ (A+B)}$$

$$330 - 27.5 = 302.5 \text{ (total shaded)}$$

10 year's ago \rightarrow E:A:Diff 1:7:6
 (E) $\rightarrow 3u - 1u = 2u$, (A) $9u - 7u = 2u$
 $2u \rightarrow 10$, $1u \rightarrow 10 \div 2 = 5$
 $3u \rightarrow 5 \times 3 = 15$

Q10. \$5600
 $75\% - 60\% = 15\%$ (diff btw saved)
 $15\% \rightarrow \$840$
 $5\% \rightarrow 840 \div 3 = 280$
 $100\% \rightarrow 280 \times 20 = 5600$ (monthly income)

Q11. 220
 $\frac{1}{4}$ of 1 = $\frac{2}{3}$ of Y
 $\frac{3}{4}$ of 1 = $\frac{6}{3}$ of Y
 $\frac{3}{4}$ of 1 + $\frac{1}{3}$ of Y = 385
 $\frac{6}{3}$ of Y + $\frac{1}{3}$ of Y = 385
 $\frac{7}{3}$ of Y = 385
 $\frac{1}{3}$ of Y = $385 \div 7 = 55$
 $\frac{2}{3}$ of Y = $55 \times 2 = 110$
 $110 \times 2 = 220$ (total given away)

Q12a. 160
 $4u - 3u = 1u$ (difference between A and C)
 $1u \rightarrow 8$, $20u \rightarrow 8 \times 20 = 160$ (total books donated)

Q12b. 16
 $7u - 3u = 4u$ (difference between D and C)
 $4u \rightarrow 8 \times 4 = 32$
 $32 \div 2 = 16$ (D must give C)

Q13a. \$45
 $2C \rightarrow 2 \times 1u = 2u$
 $1B \rightarrow 1u + 25$
 $4S \rightarrow (1u + 412) \times 4 = 4u + 48$
 $2u + 1u + 25 + 4u + 48 = 213$
 $7u + 73 = 213$
 $7u \rightarrow 213 - 73 = 140$
 $1u \rightarrow 140 \div 7 = 20$
 $20 + 25 = 45$

Q13b. \$243
 $20 \div 2 = 10$ (HP of 1C)
 $10 \times 3 = 30$ (HP of 3C)
 $213 + 30 = 243$

Q14. 4.5cm

$$17 \times 3 = 51 \text{ (total length of wire used)}$$

$$5 \times 4 = 20 \text{ (total perimeter of S)}$$

$$6 \times 3 = 18 \text{ (total perimeter of ET)}$$

$$51 - 20 - 18 = 13 \text{ (Total perimeter of IT)}$$

$$13 - 4 = 9 \text{ (2 sides)}$$

$$2 \text{ sides} \rightarrow 9, 1 \text{ side} \rightarrow 9 \div 2 = 4.5$$

Q15a. \$350

$$100\% \rightarrow 280 \text{ (ML)}$$

$$25\% \rightarrow 280 \div 4 = 70$$

$$125\% \rightarrow 70 \times 5 = 350 \text{ (MT)}$$

Q15b. 30%

$$100\% - 12\% = 88\%$$

$$\text{Mr Lim} \rightarrow 88\% \times \$2.80 = \$246.40$$

$$\text{Mr Tan} \rightarrow \$246.40 - \$1.40 = \$245$$

$$\text{Tan's original sale} \rightarrow \$350$$

$$350 \rightarrow 100\%, \frac{105}{350} \times 100\% = 30\%$$

Q16a. $\frac{9}{20}$

$$\frac{2}{5} \times \frac{3}{4} = \frac{3}{10} \text{ (50¢ coins)}$$

$$\frac{3}{5} \times \frac{3}{4} = \frac{9}{20} \text{ ($1 coins)}$$

Q16b. 240

$$\text{Value of 1 set} \rightarrow (5 \times 0.20) + (6 \times 0.50) + (9 \times \$1) = 1 + 3 + 9 = \$13$$

$$\$156 \div \$13 = 12 \text{ sets}$$

$$\text{total} \rightarrow 20 \text{u of coins}$$

$$\text{total no. of coins} \rightarrow 12 \times 20 = 240$$

Q17a. 14

$$82 \div 41 = 2$$

$$2 + 1 = 3$$

$$3n + 1 = 82, n = 27, 41 - 27 = 14$$

Q17b. 23

$$41 - 14 = 27, 2u + 1u = 3u, 3u = 27, 1u = 9$$

$$\text{total} \rightarrow 14 + 9 = 23$$

Q18a. $16 \times 4 + 12 = 16$

Q18b. 225

$$\text{(Rectangles)} 15 \times 15 = 225$$

Q18c. 108 stars

$$\sqrt{729} = 27, 27 \times 4 = 108$$

THE END