



Rosyth School
Second Semestral Assessment 2014
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 28 October 2014 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.

(20 marks)

1. Which of the following numbers is five million, eight hundred and five thousand, five hundred and eight?

- (1) 5 085 580
- (2) 5 805 508
- (3) 5 850 508
- (4) 5 850 580

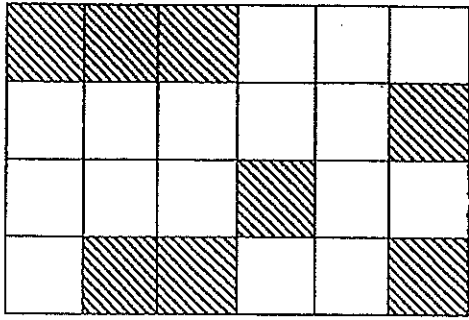
2. Mr Chin's savings is \$9 900 when rounded off to the nearest \$10. Which one of the following could be his actual savings?

- (1) \$9 889
- (2) \$9 895
- (3) \$9 905
- (4) \$9 909

3. Ahmad has 15 marbles. Bala has 18 more marbles than Ahmad. Chester has 12 more marbles than Bala. Find the ratio of Chester's marbles to Bala's marbles to Ahmad's marbles.

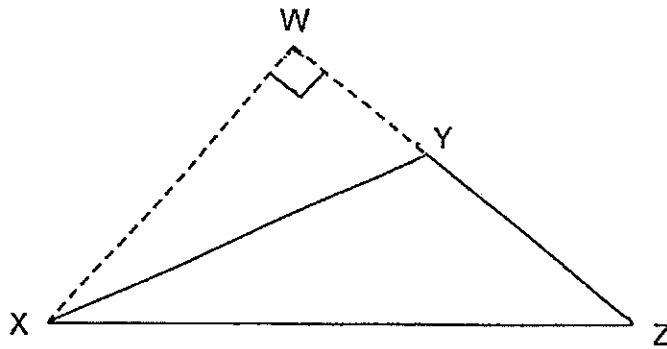
- (1) 4 : 6 : 5
- (2) 5 : 6 : 4
- (3) 5 : 11 : 15
- (4) 15 : 11 : 5

4. What fraction of the figure below is shaded?



- (1) $\frac{1}{3}$
(2) $\frac{3}{8}$
(3) $\frac{5}{12}$
(4) $\frac{5}{16}$

5. The figure below is not drawn to scale. What is the base of triangle XYZ if its height is XW ?



- (1) WY
(2) YZ
(3) WZ
(4) XZ

6. Five thousands. 4 hundreds and 13 tenths is

- (1) 5 413
- (2) 5 530
- (3) 5 401.3
- (4) 5 400.13

7. Express 0.4 as a percentage.

- (1) 0.4%
- (2) 4%
- (3) 40%
- (4) 400%

8. The average number of sweets of 4 boys is 88. If one of the boys buys 12 more sweets, what would the new average be?

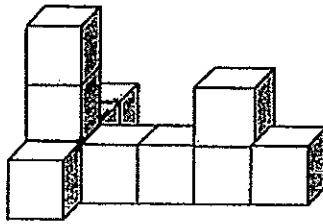
- (1) 76
- (2) 85
- (3) 91
- (4) 100

9. $\frac{5}{6}$ of the pupils in a hall are boys and the rest are girls. There are 270 boys.

How many more boys than girls are there in the hall?

- (1) 180
- (2) 216
- (3) 225
- (4) 324

10. Find the number of unit cubes to build the solid below.



- (1) 8
(2) 9
(3) 10
(4) 11
11. 4 adults and 24 children visited the zoo. They paid a total of \$288 for the tickets. The ticket for an adult cost thrice as much as the ticket for a child. How much was the ticket for an adult?

- (1) \$8
(2) \$9
(3) \$24
(4) \$27

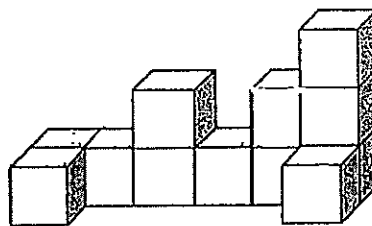
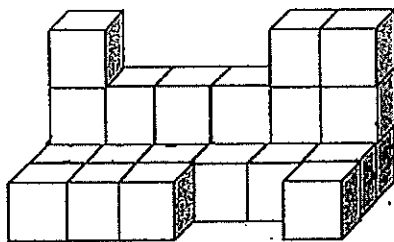
12. Which of the following is not equal to $\frac{5}{8}$?

- (1) $\frac{1}{3} + \frac{4}{5}$
(2) $\frac{7}{8} - \frac{1}{4}$
(3) $\frac{5}{6} \times \frac{3}{4}$
(4) $5 \div 8$

13. Bryan bought 98 balloons. The ratio of the number of red balloons to the number of blue balloons to the number of green balloons was $7 : 3 : 4$. How many blue balloons did Bryan buy?

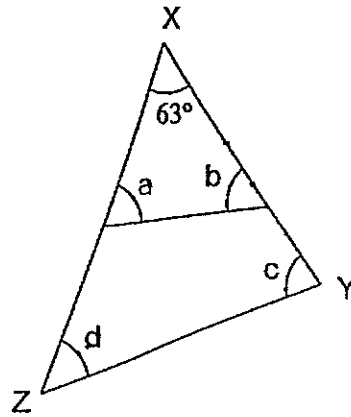
- (1) 7
- (2) 21
- (3) 28
- (4) 49

14. How many unit cubes were removed from the solid on the left to obtain the solid on the right?



- (1) 8
- (2) 9
- (3) 13
- (4) 14

15. The figure below is not drawn to scale. Given that XYZ is a triangle, find the sum of $\angle a + \angle b + \angle c + \angle d$.



- (1) 117°
- (2) 234°
- (3) 297°
- (4) 468°

(Go on to Booklet B)



Rosyth School
Second Semestral Assessment 2014
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 28 October 2014 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 7 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.

(10 marks)

16. Find the missing number in the following number pattern:

17 850, 17 200, 16 550, _____, 15 250

Ans: _____

17. Mr Syed had \$1 200 in his bank account at the beginning of the year. If he receives an interest of 2% per year, how much money will he have in his bank account at the end of one year?

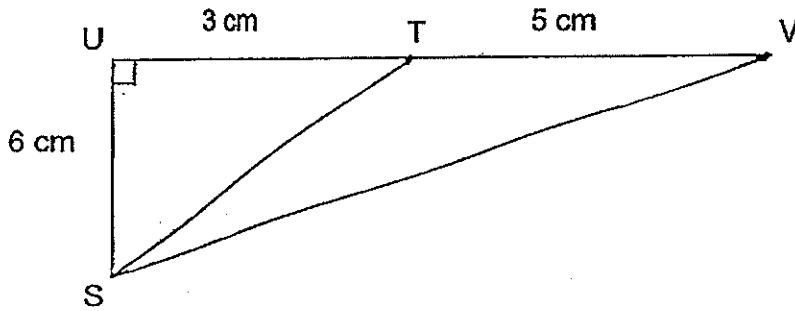
Ans: \$ _____

18. What is the missing number in the box?

$$3\frac{7}{9} = \frac{10}{9} + \frac{\boxed{?}}{3}$$

Ans: _____

19. The figure below is not drawn to scale. SUV is a right-angled triangle. Find the area of triangle TVS .



Ans: _____ cm^2

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

Ans: _____

21. Express 40¢ as a percentage of \$1.60.

Ans: _____ %

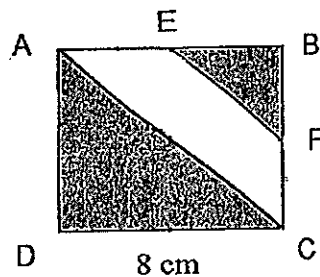
22. Find the average of the first 5 multiples of 4.

Ans: _____

23. A basket contained a total of 50 apples and pears. The ratio of the number of apples to the number of pears in the basket was 2 : 3. When some pears were added to the basket, the ratio of the number of apples to the number of pears becomes 1 : 2. How many pears are added to the basket?

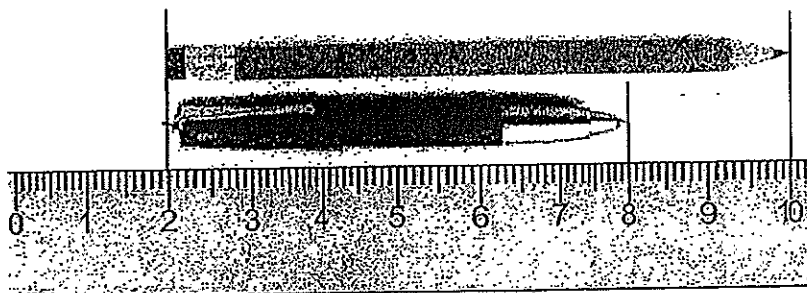
Ans: _____

24. ABCD is a square of side 8 cm. E and F are the midpoints. Find the area of the shaded triangles.



Ans: _____ cm²

25. Find the ratio of the length of the pencil to the length of the pen. Express your answer in simplest form.



Ans: _____

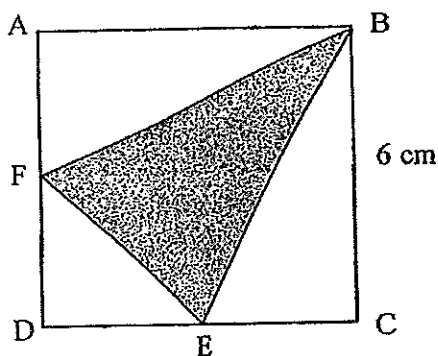
Questions 26 to 30 carry 2 marks each. Show your workings clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

26. 60% of the pupils in a primary school are boys. The ratio of the number of boys who like Mathematics to the number of boys who do not is 2 : 3. The ratio of the number of girls who like Mathematics to the number of girls who do not is 1 : 4. What percentage of the pupils like Mathematics?

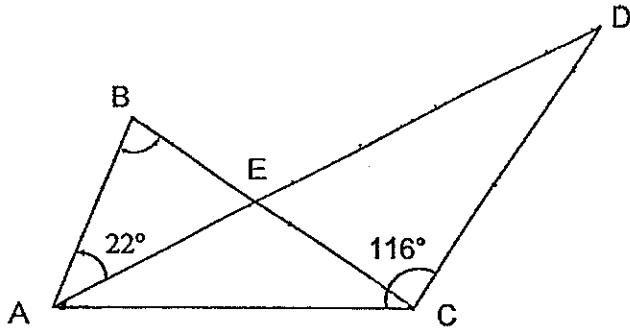
Ans: _____ %

27. ABCD is a square of side 6 cm. E and F are the midpoints of CD and AD respectively. Find the area of the shaded part.



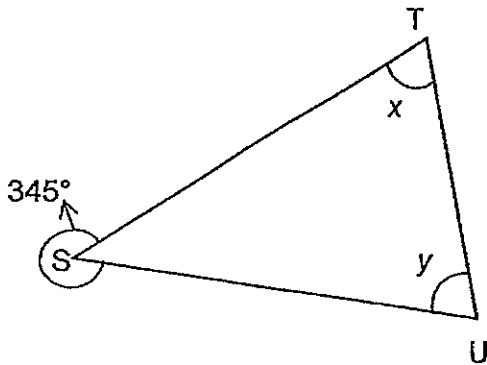
Ans: _____ cm²

28. The figure below is not drawn to scale. ABC and ADC are triangles with $AC = BC = DC$. $\angle ACD = 116^\circ$ and $\angle BAE = 22^\circ$. Find $\angle ABC$.



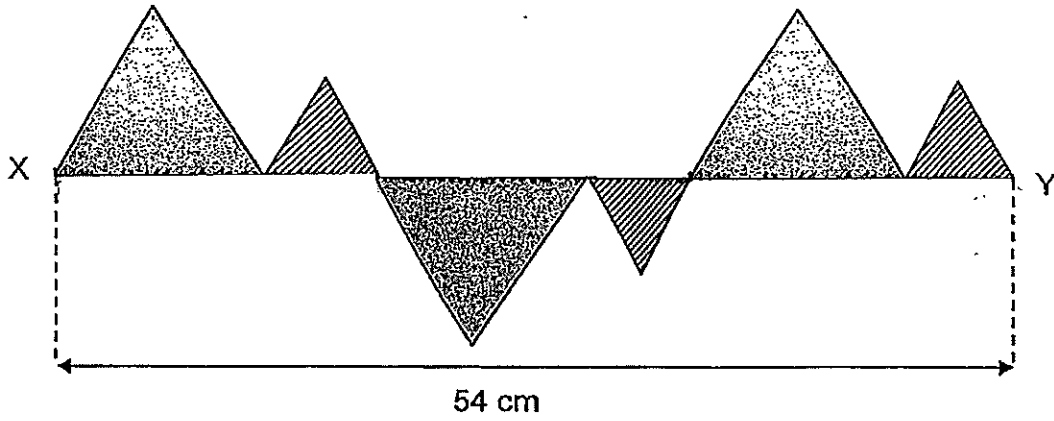
Ans: _____^o

29. The figure below is not drawn to scale. STU is a triangle. Find the sum of $\angle x + \angle y$.



Ans: _____^o

30. The shaded figure below is formed with 3 big identical and 3 small identical equilateral triangles. The length of the straight line XY is 54 cm. What is the perimeter of the shaded figure?



Ans: _____ cm

End of Paper 1



Rosyth School
Second Semestral Assessment 2014
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 28 October 2014 Parent's Signature: _____

Time: 1 h 40 min

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 16 pages (including this cover page)**

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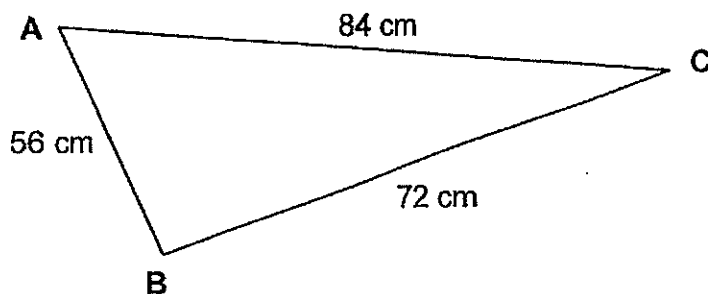
Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

1. 50 primary schools attended the NE Show. Each school sent 360 pupils and 18 teachers. What was the total number of pupils and teachers who attended the NE Show?

Ans: _____

2. The figure below is not drawn to scale. What is the ratio of the length of AB to the length of BC to the length of AC? (Give your answer in the simplest form.)



Ans: _____

3. The ratio of John's age to Zuraini's age is 9 : 6. Last year, their average age was 14 years old. How old is Zuraini now?

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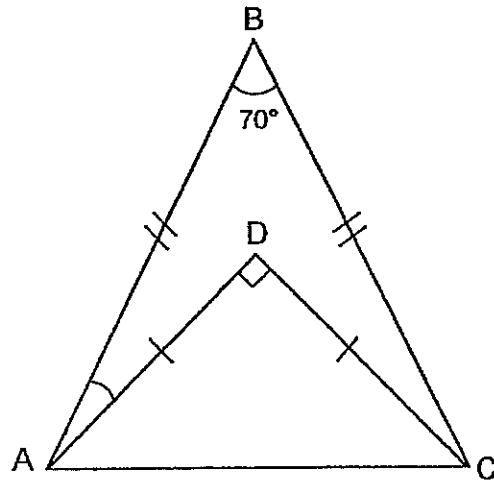
Ans: _____

4. A rectangular container is $\frac{3}{4}$ full of water. Its length and width are 9 cm and 7 cm respectively. If the capacity of the container is 0.42 litres, find the height of water in the container.

Ans: _____ cm

5. The diagram below is not drawn to scale. ABC and ADC are isosceles triangles. Find $\angle BAD$.

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Ans: _____ °

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.

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(50 marks)

6. 17 sweaters and 8 pairs of shoes cost \$1 108. A pair of shoes costs \$79.
How much does one sweater cost?

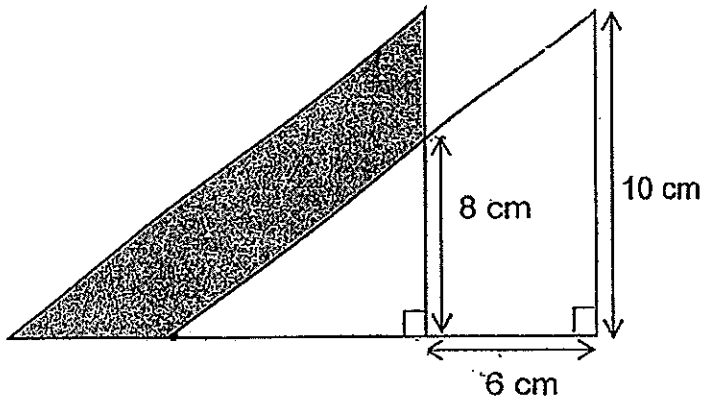
Ans: _____ [3m]

7. Terry gave $\frac{1}{3}$ of his salary to his parents and $\frac{1}{4}$ of the remainder to his wife.
His parents received \$450. How much did his wife receive?

Ans : _____ [3m]

8. The figure below shows two identical right-angled triangles overlapping each other. Find the area of the shaded part.

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Ans: _____ [3m]

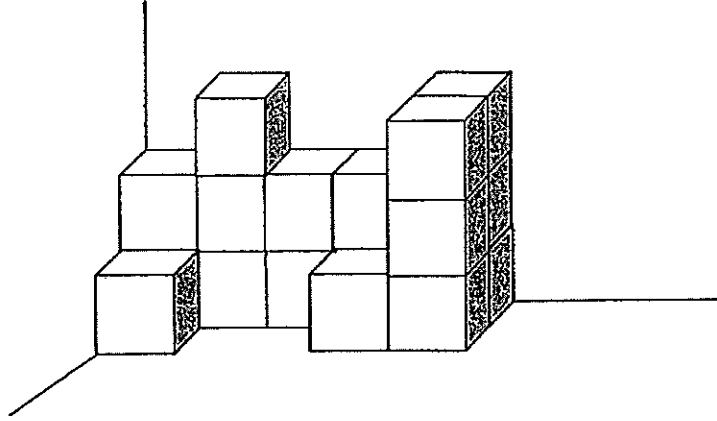
9. Mr Asim's income changes every month. In June, his income increased by 20% as compared to his income in May. In July, his income decreased by 40% as compared to his income in June. His income in June was \$1 140 more than in May. What was his income in July?

Do not write
in this space

Ans: _____ [3m]

Do not write
in this space

10. Study the solid figure below.



The solid figure is made up of 4-cm cubes. Find the volume of the figure.

Ans: _____ [3m]

11. Some girls and 15 boys donated an average of \$350 to charity. The boys donated an average of \$240. The ratio of boys to girls was 3 : 5. What is the difference between the amounts of money donated by the boys and the girls?

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Ans: _____ [4m]

12. Rosie, Siti and Tania baked some cupcakes. The ratio of the number of cupcakes Rosie baked to the number of cupcakes Tania baked was 6 : 5. Siti baked 37 cupcakes. Siti baked 7 more cupcakes than Tania. How many cupcakes did the three girls bake altogether?

Do not write
in this space

Ans: _____ [3m]

13. The ratio of the number of skirts and blouses at a shop was 5 : 7. After 60 blouses were sold, the ratio of the number of skirts to the number of the remaining blouses was 4 : 5.

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- a) How many skirts were there at first?
- b) How many blouses were there in the end?

Ans: a) _____ [3m]

b) _____ [1m]

14. There is a total of 75 cars and motorcycles in a warehouse. Each car has 4 wheels and each motorcycle has 2 wheels. The warehouse manager makes a count and finds that there are 212 wheels altogether. How many motorcycles are there in the warehouse?

Do not write
in this space

Ans: _____ [4m]

15. Every day, Kritika receives \$1.80 for pocket money while Joan receives 50¢ more. However, Kritika saves 60¢ daily which is twice what Joan saves in each day. Joan saved \$8.40 and spent the rest.

- (a) How many days did Joan take to save this amount?
- (b) How much did Joan spend in this period of time?

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Ans: a) _____ [2m]

b) _____ [3m]

16. There were 6 more men than women on a bus when it left Bus Stop A. When the bus arrived at Bus Stop B, 7 men alighted and 7 women boarded the bus. After this, there were thrice as many women as men on the bus.
- (a) How many women were there on the bus after the 7 women boarded at Bus Stop B?
- (b) How many men were there on the bus at first when it left Bus Stop A?

Do not write
in this space

Ans: a) _____ [3m]

b) _____ [2m]

17. Germaine and Jia Ling have a total of 375 buttons. 56% of the number of Germaine's buttons is equal to 4% of the number of Jia Ling's buttons.

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in this space

- (a) Express the number of Germaine's buttons as a fraction of the number of Jia Ling's buttons.
- (b) How many buttons does Jia Ling have?

Ans: a) _____ [2m]

b) _____ [3m]

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18. There were twice as many boys as girls in a class. $\frac{2}{3}$ of the boys wear spectacles and $\frac{2}{5}$ of the girls wear spectacles. If 42 more boys than girls wear spectacles, what was the total number of ~~boys and girls~~ ^{Pupils} in the class?

Ans: _____ [5m]

End of Paper

Have you checked your work thoroughly?

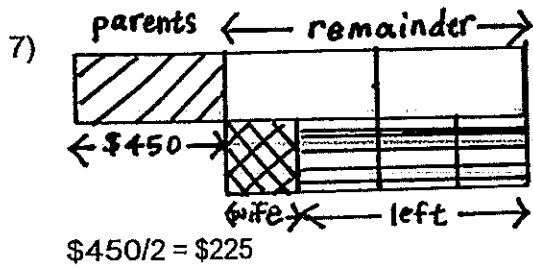
Rosyth School
Second Semestral Assessment 2014
Primary 5 Mathematics

- 1) 2
- 2) 2
- 3) 4
- 4) 1
- 5) 2
- 6) 3
- 7) 3
- 8) 3
- 9) 2
- 10) 4
- 11) 3
- 12) 1
- 13) 2
- 14) 3
- 15) 2
- 16) $16\ 550 - 650 = 15\ 900$
- 17) \$1224
- 18) 8
- 19) 15 cm^2
- 20) 1.4
- 21) 25%
- 22) 12
- 23) 10 pears
- 24) 40 cm^2
- 25) 4:3
- 26) 32%
- 27) 13.5 cm^2
- 28) 54°
- 29) 165°
- 30) $54 \times 3 = 162\text{ cm}$

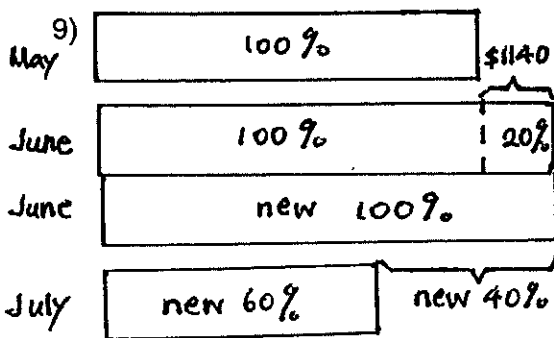
Paper 2

- 1) 18 900 pupils
- 2) 14:18:21
- 3) $14 \times 2 = 28$
 $28 + 1 + 1 = 30$
 $30 / 15 \times 6 = 12\text{ years old}$
- 4) $3/4 \times 420 = 315\text{ cm}^3$
 $315 / (9 \times 7) = 5\text{ cm}$
- 5) Angle BAC = $(180 - 70) / 2 = 55^\circ$
Angle DAC = $(180 - 90) / 2 = 45^\circ$
Angle BAD = $55 - 45 = 10^\circ$

6) $\$79 \times 8 = \632
 $\$1108 - \$632 = \$476$
 $\$476 / 17 = \28



8) $6 \times 8 = 48 \text{ cm}^2$
 $1/2 \times 6 \times 2 = 6 \text{ cm}^2$
 $48 + 6 = 54 \text{ cm}^2$



$20\% \rightarrow \$1140$
 $120\% \rightarrow 120/20 \times 1140 = \6840
 $60/100 \times 6840 = \$4104$

10) Volume of 1 cube = $4 \times 4 \times 4 = 64 \text{ cm}^3$
Volume of figure = $64 \times 17 = 1088 \text{ cm}^3$

11) Boys : Girls Total
 $3 : 5$
 $15 : 25 \quad 40$
 $15 \times \$240 = \3600
 $40 \times \$350 = \14000
 $\$14000 - \$3600 = \$10400$
 $\$10400 - \$3600 = \$6800$

12) Number of cupcakes Tania baked = $37 - 7 = 30$
5 units \rightarrow 30 cupcakes
11 units \rightarrow $11/5 \times 30 = 66$ cupcakes
 $66 + 37 = 103$ cupcakes

13) Skirts : Blouses
 At first, 5 : 7
 Now, 4 : 5

Skirts remained unchanged,

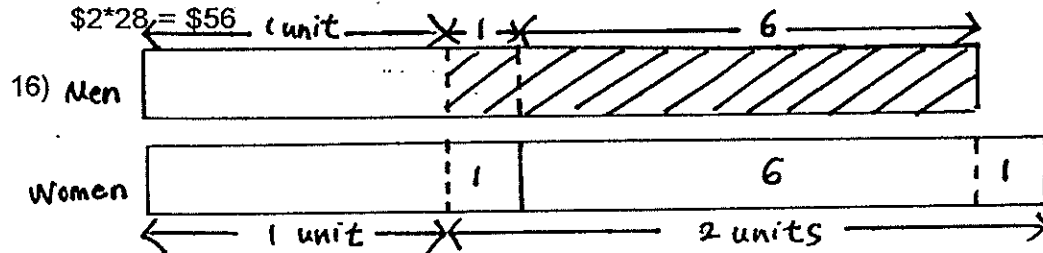
At first, 20 : 28

Now, 20 : 25

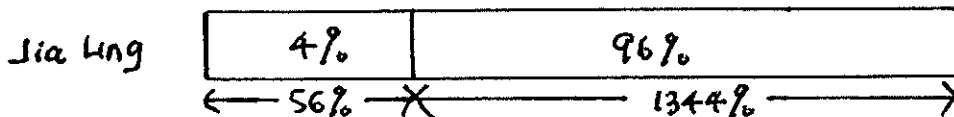
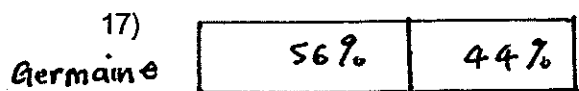
- a) 3 units --> 60
 20 units --> $20/3 \times 60 = 400$ skirts at first
 b) 25 units --> $25/3 \times 60 = 500$ blouses in the end

- 14) Assume all are cows,
 $75 \times 4 = 300$
 $300 - 212 = 88$
 $4 - 2 = 2$
 $88 / 2 = 44$ motorcycles

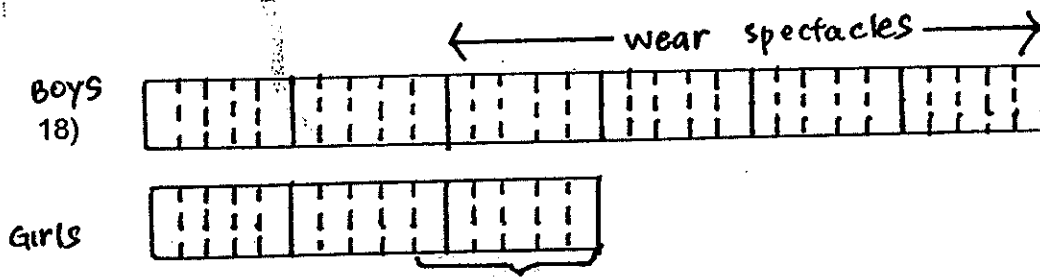
- 15a) $\$0.60 / 2 = \0.30
 $\$8.40 / \$0.30 = 28$ days
 b) $\$1.80 + \$0.50 = \$2.30$
 $\$2.30 - \$0.30 = \$2$
 $\$2 \times 28 = \56



- a) $1 + 6 + 1 = 8$
 $8 / 2 = 4$
 $4 \times 3 = 12$ women
 b) $4 + 7 = 11$ men at first



- a) $56 / 4 = 14$
 $14 \times 96 = 1344\%$
 $56\% + 1344\% = 1400\%$
 $100 / 1400 = 1 / 14$
 b) $1500\% \rightarrow 375$
 $1400\% \rightarrow 1400 / 1500 \times 375 = 350$ buttons



$$34u + 15u = 45u$$

$$20u - 6u = 14u$$

$$14u \rightarrow 42$$

$$45u \rightarrow 45/14 * 42 = 135 \text{ pupils}$$