



Rosyth School  
First Semestral Assessment 2011  
Primary 5 Mathematics

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

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

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

Date: 11 May 2011

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

Total Time for Booklets A and B : 50 min

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**PAPER 1**  
**(Booklet A)**

Instructions to Pupils:

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.
5. You are not allowed to use a calculator

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

\* This booklet consists of 6 pages (excluding 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 correct oval (1, 2, 3 or 4) on the  
Optical Answer Sheet. (20 marks)

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1. What is the value of the digit 1 in 8 010 794?

- (1) 10
- (2) 1 000
- (3) 10 000
- (4) 100 000

2. What is the value of  $88\ 000 \div 20$ ?

- (1) 44
- (2) 440
- (3) 4 400
- (4) 44 000

3. Find the sum of  $\frac{7}{12}$  and  $\frac{1}{8}$

- (1)  $\frac{2}{3}$
- (2)  $\frac{5}{24}$
- (3)  $\frac{17}{24}$
- (4)  $\frac{7}{8}$

4.  $\frac{2}{7} \div 9$  has the same value as \_\_\_\_\_.

(1)  $\frac{1}{9} \times \frac{2}{7}$

(2)  $\frac{1}{9} \times \frac{7}{2}$

(3)  $9 \div \frac{2}{7}$

(4)  $9 \times \frac{2}{7}$

5. Jermaine had 8 green stickers, 20 yellow stickers and 12 red stickers.  
Find the ratio of the number of red stickers to the total number of stickers.

(1) 1 : 5

(2) 1 : 2

(3) 3 : 7

(4) 3 : 10

6. What is the ratio of the number of letter A to the number of letter B to the number of letter N in the word "BANANA"?

(1) 1 : 2 : 3

(2) 3 : 2 : 1

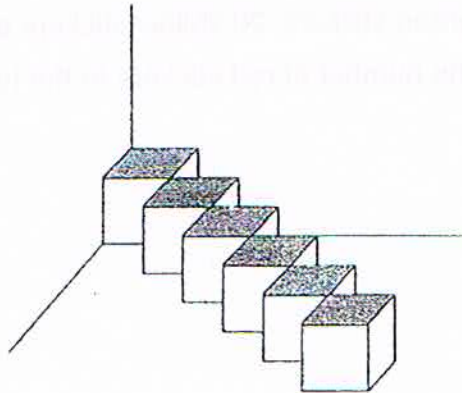
(3) 2 : 3 : 1

(4) 3 : 1 : 2

7. The ratio of the number of boys to the number of girls in a hall was **12:7**. If there were 147 girls in the hall, how many more boys than girls were there?

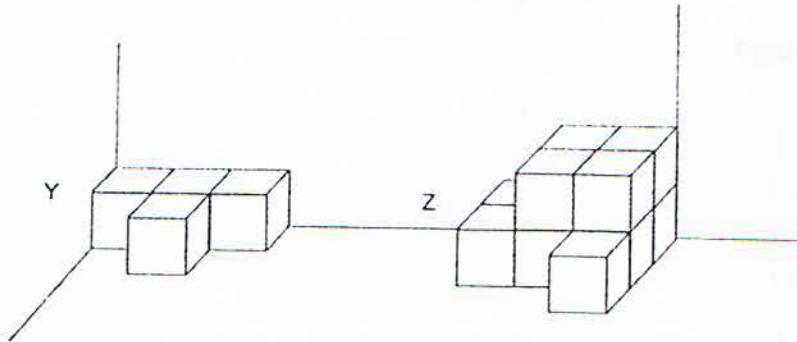
- (1) 21
- (2) 84
- (3) 105
- (4) 399

8. The figure is made up of identical cubes of side 2 cm. Find the volume of the figure.



- (1)  $8 \text{ cm}^3$
- (2)  $12 \text{ cm}^3$
- (3)  $24 \text{ cm}^3$
- (4)  $48 \text{ cm}^3$

9. Find the number of cubes that must be added to Solid Y so that it becomes Solid Z.



- (1) 6  
(2) 7  
(3) 8  
(4) 9
10. Find the value of  $27 + (138 - 15) \div 3$ .
- (1) 41  
(2) 50  
(3) 68  
(4) 160
11. Mrs Singh cuts a rope into 3 pieces in the ratio  $3 : 7 : 4$ . If the longest piece is 24 cm longer than the shortest piece, what is the original length of the rope?
- (1) 21 cm  
(2) 49 cm  
(3) 56 cm  
(4) 84 cm

12. Stanley's parents gave him some pocket money every week. He spent  $\frac{1}{4}$  of the money on food and  $\frac{1}{6}$  of it on transport. What fraction of his money had he left?

(1)  $\frac{1}{24}$

(2)  $\frac{1}{12}$

(3)  $\frac{5}{12}$

(4)  $\frac{7}{12}$

13. The ratio of the height of a stick to the height of an umbrella is 4 : 5. The umbrella is 40 cm. What is the total height of the stick and umbrella altogether?

(1) 32 cm

(2) 40 cm

(3) 72 cm

(4) 90 cm

14. Eve is 12 years old and Alan is twice her age. What is the ratio of Alan's age to Eve's age in 8 years time?

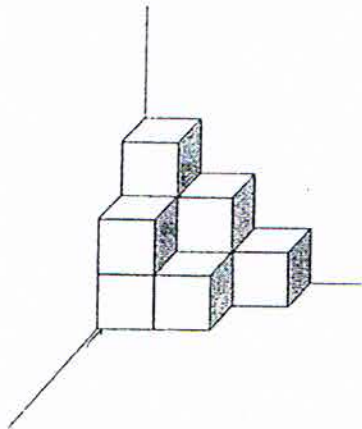
(1) 1 : 2

(2) 2 : 1

(3) 5 : 8

(4) 8 : 5

15. The figure below is made up of 2-cm cubes. How many more cubes are needed to form a cube of volume  $216 \text{ cm}^3$ ?



(1) 6

(2) 10

(3) 18

(4) 207







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Primary 5 Mathematics

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

Date: 11 May 2011

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Total Time for Booklets A and B : 50 min

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**PAPER 1**  
**(Booklet B)**

Instructions to Pupils:

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. You are **not** allowed to use a calculator

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

\* This booklet consists of 6 pages (excluding this cover page)

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Questions 16 to 25 carry 1 mark each. Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For each question which require units, give your answers in the units stated. (20 marks)

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16. Write the following in numerals:

Four million, eighty-eight thousand and three.

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

---

17. Fill in the missing number in the blank below.

700 090, \_\_\_\_\_, 698 090, 697 090

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

---

18. Find the sum of  $\frac{3}{4}$  and  $\frac{1}{2}$ . Give your answer in its simplest form.

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

---

19. Find the difference between  $5\frac{3}{4}$  and  $4\frac{1}{3}$ .

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

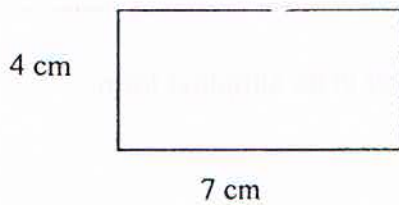
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20. In a class of 35 pupils, 17 pupils wear glasses. What is the ratio of the number of pupils who do not wear glasses to the number of pupils who wear glasses?

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

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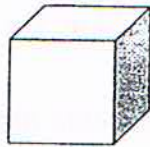
21. Using the figures below, find the ratio of the perimeter of the rectangle to the perimeter of the square. Give your answer in its simplest form.



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

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22. Find the volume of a cube of length 9 cm.



9 cm

Ans : \_\_\_\_\_ cm<sup>3</sup>

---

23. A class has 41 pupils. There are 7 more girls than boys. Find the ratio of the number of girls to that of boys.

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

---

24. The ratio of three sides of a triangle is 4 : 5 : 3. If the perimeter of the triangle is 60 cm, find the longest side of the triangle.

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

---

25. During a running test, a pupil was to run  $3\frac{1}{5}$  km. He managed to run  $2\frac{7}{10}$  km before stopping to rest. How much more did he need to run? Give your answer in the simplest form.

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

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Questions 26 to 30 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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26. Find the value of  $18 \times 5 - (7 + 8) - 9 \div 3$ .

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

---

27. The points P, Q, R and S are on a straight line.  
The ratio of PQ to PR is 1 : 2. The ratio of PR to PS is 1 : 2.  
What is the ratio of PQ to PS? Give your answer in its simplest form.



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

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28. Siti spent  $\frac{4}{5}$  of her money on a handphone and  $\frac{1}{2}$  of the remainder on a book. After paying for all the items, she had \$29 left. How much money did she spend altogether?

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

---



29. The ratio of the length to the breadth to the height of a cuboid is **5:1:2**.  
The total length of its breadth and height is 12 cm. Find its volume.

Ans : \_\_\_\_\_  $cm^3$

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30. Michael and Bala had \$216 altogether. When Michael gave  $\frac{1}{5}$  of his money to Bala, they found they had the same amount of money. **How** much money did Bala have at first?

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

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Rosyth School  
First Semestral Assessment 2011  
Primary 5 Mathematics

Name: \_\_\_\_\_ Register No. \_\_\_\_\_

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

Date: 11 May 2011

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

Time: 1 h 40 min

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**PAPER 2**

Instructions to Pupils:

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Show your workings clearly as marks are awarded for correct working.
5. Write your answers in this booklet.
6. You are allowed to use a calculator.

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)

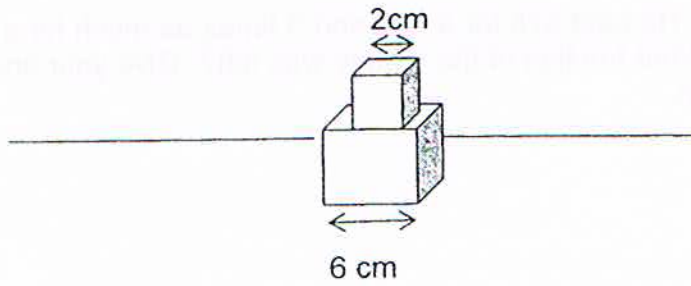
- 1 Peter had \$350. He paid \$75 for a bag and 3 times as much for a pair of leather shoes. What fraction of the money was left? Give your answer in the simplest form.

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

- 2 If  $\frac{2}{5}$  of A is equal to  $\frac{1}{3}$  of B, what is the ratio of A : B?  
Give your answer in the simplest form.

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

- 3 The figure below is made up of 2 blocks of cubes. Find the total volume of the figure.



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

- 4 A businessman needed to ship 372 500 similar copies of dictionary overseas. 25 000 copies of these dictionaries could be packed into a container. What is the ~~maximum~~<sup>minimum</sup> number of similar containers needed to pack all the dictionaries in?

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

5

Gina and Mike had the same amount of money. After Gina gave \$42 to Mike, Mike had twice as much money as Gina. How much money did Mike have in the end?

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.

(50 marks)

6.

The ratio of Keith's age to Simon's age is 8 : 7 this year. 2 years ago, Keith was 22 years old. What is the ratio of Keith's age to Simon's age in 6 years' time? Give your answer in the simplest form.

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

7. A rectangular tank measures 45 cm by 20 cm by 16 cm. Mr Lim uses a pail that can hold  $1200 \text{ cm}^3$  of water. How many full pails of water must he pour into the tank before he can fill the tank completely?

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

8. Mary bought three types of snacks.  $\frac{3}{7}$  of the snacks were chocolates.

The remaining snacks were sweets and biscuits.

$\frac{5}{12}$  of the remainder were sweets.

If there were 6 more chocolates than biscuits, how many sweets were there?

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

9. There were 60 pupils in a room. After  $\frac{1}{2}$  of the boys and  $\frac{1}{4}$  of the girls left the room, there were an equal number of boys and girls who remained in the room. Find the ratio of the number of girls to the number of boys in the room at first. Give your answer in the simplest form.

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



10. Grace and Fiona had the same number of stamps. Grace sold  $\frac{1}{5}$  of her stamps and Fiona sold  $\frac{2}{3}$  of her stamps. Fiona had 392 stamps fewer than Grace after that. How many stamps did Fiona sell?

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



11. The table below shows the charges at a carpark.

Michele parked at the carpark from 10 a.m. to 6.40 p.m. on Monday and Sunday.

a) How much did Michele have to pay in total for the parking charges on Monday?

b) How much cheaper did she pay for the parking charges on Sunday than on Monday?

Time	Charges (Weekday)	Charges (Saturday /Sunday /Public holiday)
7 a.m. to 11 a.m.	\$1.50 per hour	\$1.20 per hour
11 a.m. to 5 p.m.	\$ 2.20 per hour	\$ 1.80 per hour
5 p.m. onwards	\$0.50 every $\frac{1}{2}$ h or part thereof	\$2.20 per entry

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

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

12.

A rectangular tank 20 cm long by 10 cm wide is  $\frac{3}{4}$  filled with water.

The volume of water in the tank is ~~3.2~~ <sup>4.8</sup> l.

- a) Find the height of water in the tank.
- b) How much more water is needed to fill the tank to the brim?

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

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

13. There are three boxes of pens.  $\frac{2}{7}$  of the number of pens in Box A is equal to  $\frac{1}{5}$  of the number of pens in Box B. The number of pens in Box C is only  $\frac{2}{5}$  the number of pens in Box B. There are 267 more pens in Box B than in Box A.

- a) How many pens are there in Box C?
- b) How many pens are there altogether?

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

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

14. Guri wants to make some 3-ring files and 4-ring files with the materials he has. If he wants to make 30 files with 104 rings, how many of each type can he make?

Ans: 3-ring files \_\_\_\_\_ }  
4-ring files \_\_\_\_\_ } [4m]

15. Ariel received 3 times as much allowance as Bala.  
Cathy received half as much allowance as Ariel.  
Their father added another \$275 to Bala's allowance, Bala would have 4 times as much as Cathy. In order for all three of them to have the same amount of money,
- a) how much money must Bala give to Ariel?
  - b) how much money must Bala give to Cathy?

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

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

16. 4 pens and 6 erasers cost \$12.40.  
2 erasers and 3 sharpeners cost \$5.10  
3 pens and 3 erasers cost \$8.40
- a) How much does 1 eraser cost?
  - b) How much does 1 sharpener cost?

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

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

17. A tank was  $\frac{1}{2}$  filled with water. Mina scooped  $\frac{1}{3}$  of the water out from the tank. Next, John poured in  $250\text{ ml}$  of water into the tank and the volume of the water in the tank is now  $2\text{ l } 55\text{ ml}$ .
- a) How much water did Mina scoop out from the tank?
- b) How much water was there in the tank at first?

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

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

18. Anna and Bob had some money in the ratio 6 : 5. Anna gave  $\frac{1}{4}$  of her money to Bob.

- a) Find the new ratio of the amount of money Anna had to the amount of money Bob had in the end.
- b) If Anna had \$550 more than Bob at first, how much less money did she have than Bob in the end?

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

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

End of Paper





# ANSWER SHEET

EXAM PAPER 2011

SCHOOL : ROSYTH PRIMARY  
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1

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

16)4 088 003

17)6 99 090

18) $1\frac{1}{4}$

19) $15\frac{1}{12}$

20)18:17

21)11:8

22)729cm<sup>3</sup>

23)24:17

24)25cm

25)  $\frac{1}{2}$  km

26)72

27)1:4

28)\$261

29)640cm<sup>3</sup>

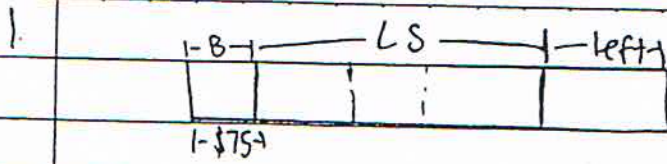
30)\$81



# ROSYTH SCHOOL

NAME \_\_\_\_\_ CLASS \_\_\_\_\_ DATE \_\_\_\_\_

SUBJECT \_\_\_\_\_ GROUP \_\_\_\_\_



1 ————— \$350 —————

$$1u \rightarrow 75$$

$$4u \rightarrow 75 \times 4 = 300 \text{ (total spent)}$$

$$350 - 300 = 50 \text{ (left)}$$

$$\frac{50}{350} = \frac{1}{7}$$

Ans:  $\frac{1}{7}$



A:B



A : B

$$\frac{2}{5} : \frac{1}{3}$$

$$\frac{2}{5} = \frac{2}{5}$$
$$\frac{1}{3} = \frac{2}{6}$$

Ans:  $\frac{5}{6}$

3.

Volume A: $L \times B \times H$	A:B
$2 \times 2 \times 2$	$= 8 + 216$
$= 8$	$= 224$

Volume B:  $6 \times 6 \times 6$

$$= 216$$

Ans: 224

4.  $372500 \div 25000 = 14.9 \approx 15$   
 $14 + 1 = 15$

Ans: 15

5. Before: Gina: Mike      Total:  
 $3 \times 1 = 1 \times 3$        $2 \times 3$   
 $3:3$        $6$

After: Gina: Mike      Total  
 $2 \times 1 = 2 \times 2$        $3 \times 2$   
 $2:4$        $6$

$14 \rightarrow 42$

$42 \rightarrow 42 \times 4 = 168$

Ans: \$168

6. Now:  $24:2 = 12:1$  (Keith)

K:S

$3 \times 8 = 7 \times 3$   
 $6 \times 24 = 21 \times 6$   
 $5 \times 30 = 27 \times 5$   
 $10:9$

6 years time

Ans: 10:9

7. Volume of tank:  $L \times B \times H$   
 $= 45 \times 20 \times 16$

$= 14400$

$14400 \div 1200 = 12$

Ans: 12

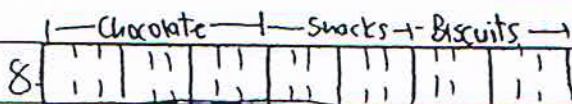




# ROSYTH SCHOOL

NAME \_\_\_\_\_ CLASS \_\_\_\_\_ DATE \_\_\_\_\_

SUBJECT \_\_\_\_\_ GROUP \_\_\_\_\_



~~8~~ C:S:B Total

9:5:7 21

$9-7=2$

$2u \rightarrow C$

$1u \rightarrow S$

$5u \rightarrow B$

Ans: 15

9. After: G:B Remained

$1:1$   $3u+3u=6u$

$\frac{3}{4} : \frac{1}{2}$  (G):(B)

$3:3$  Left

$1u+3u=4u$

$(3)(B)$

Total units  $\Rightarrow 6+4=10u$

$10u \rightarrow 60$

$1u \rightarrow 6$

$6u \rightarrow 6 \times 6 = 36$  (boys)

$4u \rightarrow 6 \times 4 = 24$  (girls)

G:B

$\frac{36}{6} : \frac{24}{6} = 6:4 = 3:2$

~~4~~

2:3

Ans: 2:3

10.  $\frac{2}{3} - \frac{1}{4} = \frac{10}{12} - \frac{3}{12}$

$= \frac{7}{12}$  (Fiona sold more)

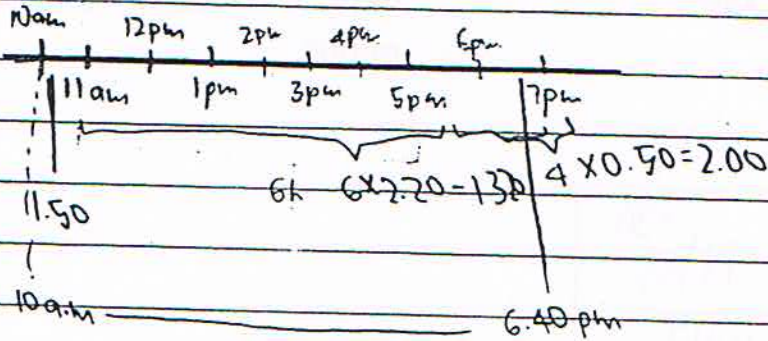
$7u \rightarrow 392$

$1u \rightarrow 392 \div 7 = 56$

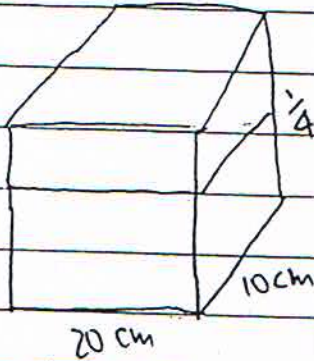
$10u \rightarrow 56 \times 10$

11. Monday 10 am - 6.40 pm

10 am - 11 am



b)  $16.70 - 14.20 = 2.50$



$\frac{1}{4}(480)$

$480 = 4800 \text{ cm}^3$

$20 \times 10 = 200 \text{ (Area)}$

$4800 \div 200 = 24$

Height of water is 24 cm.

$34 \div 24$

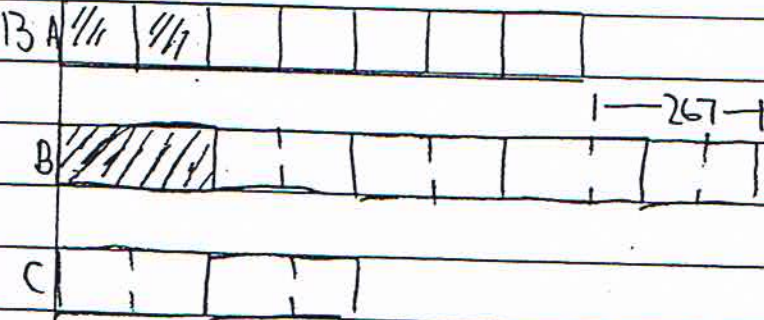
$14 \div 8$

Volume:  $L \times B \times H$

$20 \times 10 \times 8$

$= 1600$

$1600 \text{ cm}^3$  of water is needed to fill the tank.



a) 3 units  $\Rightarrow 267$

1 unit  $\Rightarrow 267 \div 3$

$= 29$

4 units  $\Rightarrow 4 \times 89$

$= 356$

b)

21 units  $\Rightarrow 21 \times 89$

$= 1869$

127

b) Ans 1869

a) Ans 356





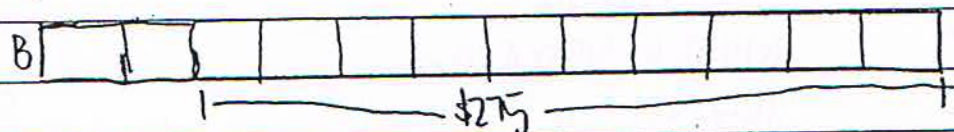
# ROSYTH SCHOOL

NAME \_\_\_\_\_ CLASS \_\_\_\_\_ DATE \_\_\_\_\_

SUBJECT \_\_\_\_\_ GROUP \_\_\_\_\_

14.  
14.

No. of 3ring files	ring x3	No. of 4ring files	Ring x4	Rings =	Files =30
13	39	17	68	39+68 = 107	13+17 = 30
16	48	14	56	48+56 = 104	16+14 = 30



a)  $10u \rightarrow \$275$   
 $1u \rightarrow \frac{\$275}{10} = 27.50 \text{ (Ariel)}$   
 $21 \div 3 = 7$   
 $7 - 6 = 1$   
 $1 \text{ unit} \Rightarrow \$27.50$

b)  $7 - 3 = 4$   
 $4 \text{ units} \Rightarrow 4 \times 27.50 = 110$

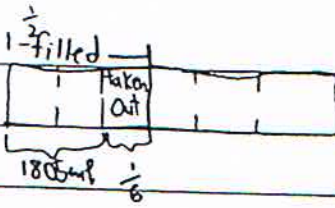
16. a)  $4P + 6E = \$12.40$   
 b)  $2E + 3S = \$5.10$   
 c)  $3P + 3E = \$8.40$   
 (c) x 2  $\rightarrow$  d)  $6P + 6E = \$16.80$

$1P = \$4.40 \div 2 = \$2.20$   
 $3P = \$6.60$   
 $3E = \$8.40 - \$6.60 = \$1.80$

b)  $2E = 2 \times \$0.60 = \$1.20$   
 $3S = \$5.10 - \$1.20 = \$3.90$   
 $1S = \$3.90 \div 3 = \$1.30$

$d - a \rightarrow 2P + 6E + 10E - \$12.40$   
 $1E = \$1.80 \div 3 = \$0.60$

17.



$$a) 2 \times 55 \text{ ml} = 2055 \text{ ml}$$

$$2055 - 250 = 1805$$

$$1805 \div 2 = 902.5$$

$$b) 3 \text{ units} \rightarrow 902.5 \times 3$$

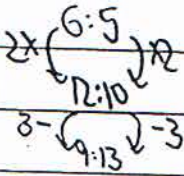
$$= 2707.5$$

$$a) \text{Ans: } 2.5$$

$$b) \text{Ans: } 2707.5$$

18.

A:B



$$a) 12 \times \frac{1}{4} = 3$$

$$a) \text{Ans: } 9:13$$

$$b) 12 - 10 = 2$$

$$2 \text{ units} \Rightarrow \$550$$

$$1 \text{ unit} \Rightarrow \$275$$

$$4 \text{ units} \Rightarrow 4 \times \$275$$

$$= \$1100$$

$$b) \text{Ans: } 1100$$