Rosyth School
First Semestral Examination 2010
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 12 May 2010 Parent's Signature: _____

Total Time for Booklets A and B : 50 min

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 7 pages (excluding 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. (20 marks)

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1 Which one of the following numbers is greater than 6 070 380?

(1) 6 069 000

(2) 6 070 281

(3) 6 069 381

(4) 6 700 380

2 Which one of the following fraction is the smallest?

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

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

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

(4) $\frac{13}{20}$

3 Alison bought $\frac{2}{3}$ kg of flour to bake 3 pies. How much flour does she need to bake a pie?

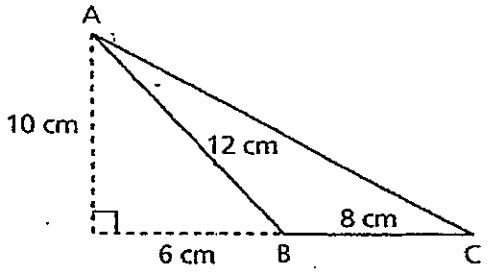
(1) $\frac{2}{9}$ kg

(2) $\frac{1}{3}$ kg

(3) $\frac{1}{2}$ kg

(4) 2 kg

4 Find the height of triangle ABC.



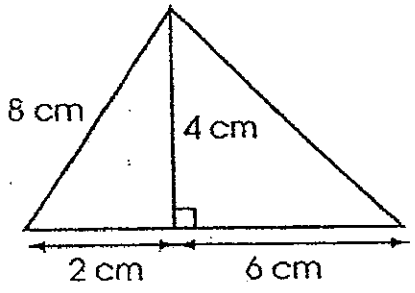
(1) 8 cm

(2) 10 cm

(3) 12 cm

(4) 14 cm

5 Find the area of the triangle below.



(1) 4 cm^2

(2) 12 cm^2

(3) 16 cm^2

(4) 32 cm^2

(Go on to the next page)

6 The ratio of the number of erasers to the number of sharpeners is 5 : 3. The ratio of the number of sharpeners to the number of pens is 3 : 7. What is the ratio of the number of erasers to the total number of stationery in the bookshop?

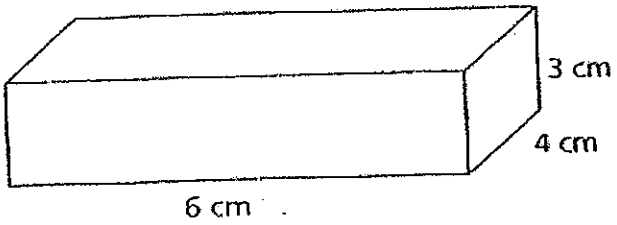
(1) 1 : 2

(2) 1 : 3

(3) 5 : 7

(4) 5 : 3

7 Find the volume of the cuboid shown below.



(1) 12 cm^3

(2) 18 cm^3

(3) 24 cm^3

(4) 72 cm^3

8 In a class of 38 pupils, 22 pupils wear glasses. What is the ratio of the number of pupils who wear glasses to the number of pupils who do not wear glasses?

(1) 11 : 8

(2) 8 : 11

(3) 11 : 19

(4) 19 : 11

(Go on to the next page)

9 Susan and Raju shared $36 between themselves. If Susan had $6 more than Raju, find the ratio of Raju's share to their total share.

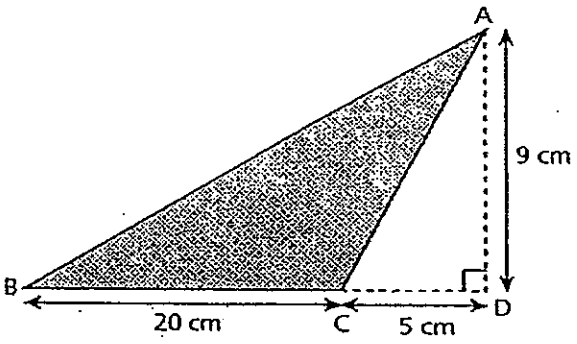
(1) 5 : 7

(2) 7 : 5

(3) 5 : 12

(4) 7 : 12

10 What is the area of triangle ABC?



(1) 22.5 cm^2

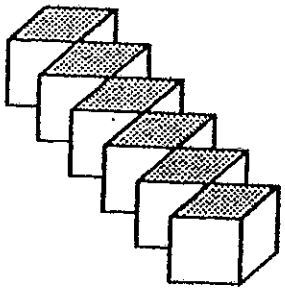
(2) 90 cm^2

(3) 112.5 cm^2

(4) 180 cm^2

(Go on to the next page)

11 The solid is made up of 3 cm cubes. Find the volume of the solid.



(1) 9 cm^3

(2) 27 cm^3

(3) 162 cm^3

(4) 243 cm^3

12 The ratio of the length to the breadth to the height of a cuboid is 5 : 4 : 3. If the length is 3 cm longer than the breadth, find its volume.

(1) 36 cm^3

(2) 60 cm^3

(3) 1620 cm^3

(4) 3240 cm^3

(Go on to the next page)

13 Eunice cut a birthday cake into 12 pieces. Her brother ate 6 pieces and she ate $\frac{1}{3}$ of the remaining pieces. What fraction of the cake was left?

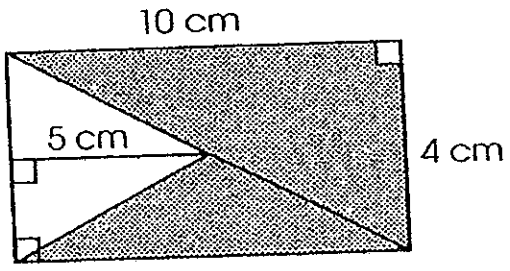
(1) $\frac{1}{4}$

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

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

(4) $\frac{2}{3}$

14 Find the shaded area of the figure.



(1) 10 cm^2

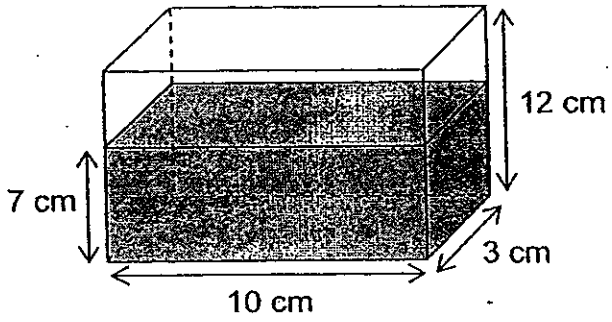
(2) 20 cm^2

(3) 30 cm^2

(4) 40 cm^2

(Go on to the next page)

15 The diagram below shows a tank filled with water to a depth of 7 cm. How much more water can the tank contain?



(1) 150 cm^3

(2) 210 cm^3

(3) 252 cm^3

(4) 360 cm^3

(Go on to the next page)

Rosyth School
First Semestral Examination 2010
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 12 May 2010 Parent's Signature: _____

Total Time for Booklets A and B : 50 min

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 7 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

16 What must be added to 4389 to make 450 000?

Ans: _____

17 Find the value of $35 + (26 - 2) \div 3 \times 2$.

Ans: _____

18 Find the value of $6\frac{2}{3} \times 4\frac{3}{4}$. Leave your answer in the simplest form.

Ans: _____

(Go on to the next page)

19 Find the value of $\frac{2}{3} - 8$. Leave your answer in the simplest form.

Ans: _____

20 In $42 : 77 = 6 : x$, find the value of x.

Ans: _____

21 A piece of ribbon 3 metres long is cut into three pieces in the ratio 4 : 1 : 5. Find the length of the shortest piece.

Ans: _____ cm

(Go on to the next page)

22 The ratio of the heights of two trees is 3 : 5. If the shorter tree is 15m, find the difference between the height of the two trees.

Ans: _____m

23 The length of a rectangle is 15 cm. Its breadth is 6 cm. Find the ratio of its breadth to its perimeter. Leave your answer in the simplest from.

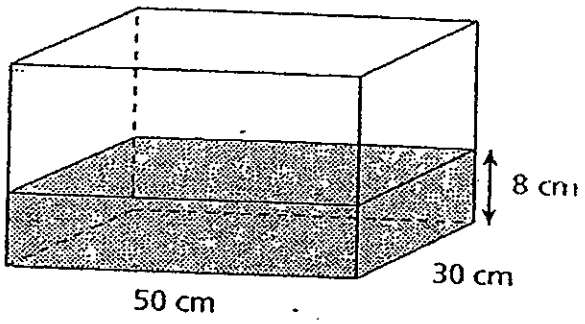
Ans: _____

24 Michael, Dwayne and Siti donated a certain sum of money in the ratio 5 : 4 : 9 respectively. If Siti donated $20 more than Michael, how much did Siti donate?

Ans: $_____

(Go on to the next page)

25 Find the volume of water in the tank shown below. Leave your answer in litres.



Ans: _____ litres

(Go on to the next page)

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)

26 Daniel has $2 more than Peter and $10 more than Sam. Together they have $48. How much does Sam have?

Ans: $_____

27 There are 320 packets of rice in a factory. $\frac{1}{5}$ of them are exported to Australia and $\frac{1}{8}$ of them are sold. How many packets of rice are left in the factory?

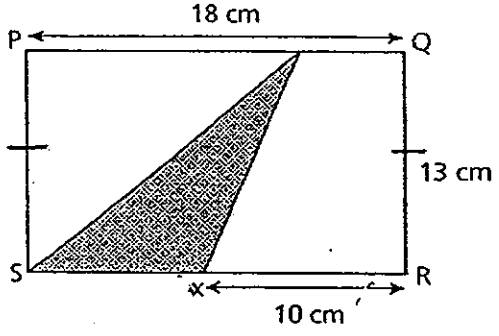
Ans:

(Go on to the next page)

28 $\frac{4}{5}$ of Tina's lollipops is equal to $\frac{2}{3}$ of Sammy's lollipops. If Sammy has 15 lollipops more than Tina, find the number of lollipops they have altogether.

Ans: _____

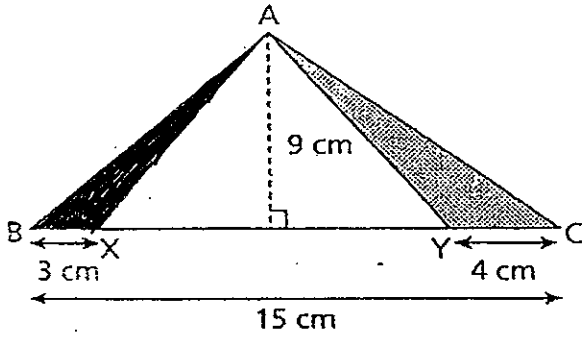
29 Find the shaded area in the figure below.



Ans: _____ cm^2

(Go on to the next page)

30 Find the shaded area of triangle ABC.



Ans: _____ cm^2

END OF PAPER

Rosyth School
First Semestral Examination
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 12 May 2010 Parent's Signature: _____

Time: 1 h 40 min

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 13 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.

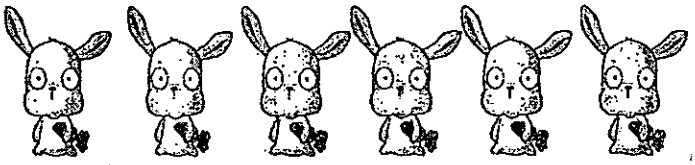
(10 marks)

1 What is the missing number in the box?

$$\frac{4}{6} = \frac{16}{\square}$$

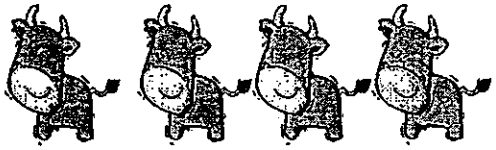
Ans: _____

2 What is the ratio of the number of cows to the number of rabbits to the number of lions in the simplest form?



Rabbits

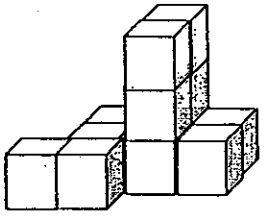
Lions



Cows

Ans: _____

3 The following solid is made up of 1 cm cubes. What is the volume of the solid?

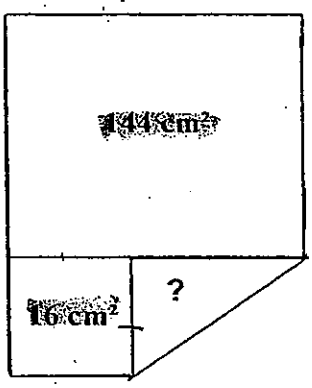


Ans: _____ cm^3

4 A container completely filled with syrup weighs 1 kg. The mass of the empty container is 350 g. What is the mass of the container when it is half filled with syrup?

Ans: _____ g

5 The figure (not drawn to scale) is made up of 2 squares and a triangle. The areas of the 2 squares are shown. What is the area of the triangle?



Ans: _____ cm²

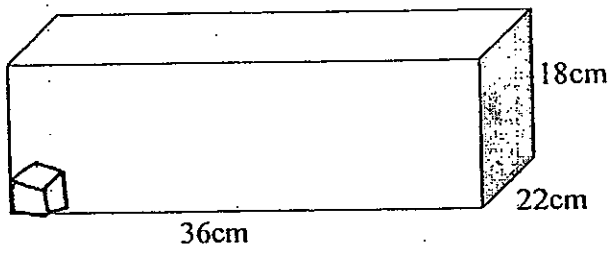
(Go on to the next page)

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 Omar's age to Paul's age is 5 : 7 this year. Omar was 9 years old last year. What was the ratio of Omar's age to Paul's age last year?

Ans: _____ [3]

7 A rectangular container is 36 cm by 22 cm by 18 cm. What is the maximum number of 4 cm cubes that can be placed into the container?



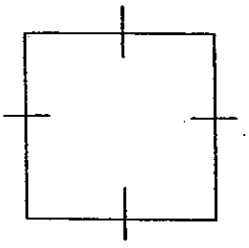
Ans: _____ [3]

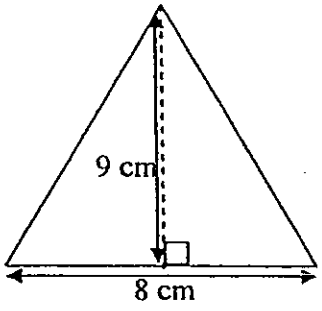
(Go on to the next page)

8 $\frac{5}{11}$ of the ice-cream sticks are red. The remaining ice-cream sticks are either yellow or green. The yellow ice-cream sticks are three times as many as the green one. How many ice-cream sticks are there altogether if there are 45 yellow ice-cream sticks?

Ans: _____ [3]

9 The area of the square is the same as the area of the triangle. Find the perimeter of the square.





Ans: _____ [3]

10 A rectangular tank measuring 50 cm by 40 cm by 30 cm is filled with water up to $\frac{3}{5}$ of its height. How many cups are needed to fill the rectangular tank completely if the capacity of each cup is 250 cm^3?

Ans: _____ [4]

11 $\frac{2}{5}$ of the total number of cakes in Box A is equal to $\frac{1}{4}$ of the total number of cakes in Box B. The number of cakes in Box C is only $\frac{1}{2}$ the number of cakes in Box B. After half the number of cakes in Box B are removed and put into Box C, there are 32 cakes in Box C. How many cakes are in Box A?

Ans: _____ [3]

12 Ali, Bala and Carl shared some marbles in the ratio 8 : 3 : 7. After both Ali and Carl had given a total of 396 marbles to Bala, all the three boys would have the same number of marbles. How many marbles did each boy have at first?

Ans: Ali: _____ }

Bala: _____ }

Carl: _____ } [4m]

(Go on to the next page)

13 Cindy went shopping and spent $\frac{1}{8}$ of her money on a pair of shoes, $\frac{1}{5}$ on some clothes and $\frac{1}{3}$ of the remaining money on a bag. The pair of shoes cost $65.

(a) How much did Cindy have at first?

(b) How much did she spend on her bag?

Ans: (a) _____ [1]

(b) _____ [3]

14 In a school hall, a certain number of students can be arranged such that there are exactly 21 students per row. If the same number of students is arranged in rows of 16 students each, there will be 7 more rows and 8 students left over. How many students are there altogether?

Ans: _____ [4]

(Go on to the next page)

15 There are 8 840 households and there are 13 laptops for every 8 households. How many more laptops are needed so that there will be 12 laptops for every 4 households?

Ans: _____ [4]

16 Mr Phua Chu Kang bought 5 times as many packets of bryani rice as nasi lemak for his workers. He paid a total of $165. Each packet of bryani cost twice as much as a packet of nasi lemak. He paid $6 for a packet of bryani rice.

(a) How many packets of nasi lemak did he buy?

(b) How many packets of bryani rice did he buy?

Ans: (a) _____ [4]

(b) _____ [1]

(Go on to the next page)

17 Mrs Tan bought some stationery. $\frac{1}{2}$ of the stationery were pens which cost 90¢ each, $\frac{1}{3}$ of them were pencils which cost 50¢ each and the rest were erasers which cost 30¢ each. She spent $25.90 on the pens and pencils.

(a) How much did she spend on the erasers?

(b) How much did she spend on the stationery?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

18 There were 420 people in the hall before the start of the concert. The ratio of the number of males to the number of females at that time was 7 : 13. At the end of the concert, the ratio of the number of males to the number of females became 3 : 5. The number of males before the start of the concert and at the end of the concert remained the same.

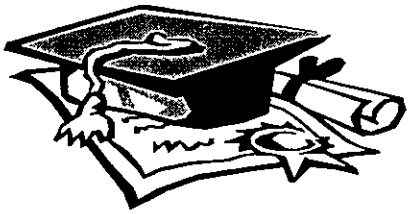
(a) What was the number of females before the start of the concert?

(b) What was the number of people at the end of the concert?

Ans: (a) _____ [2]

(b) _____ [3]

End of Paper

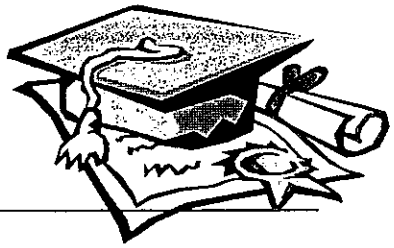


ANSWER SHEET

EXAM PAPER 2010

SCHOOL : ROSYTH PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1



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

16)445611 **17)51** **18)$1\frac{11}{12}$** **19)1/12** **20)11**

21)30cm **22)10m** **23)1:7** **24)$45** **25)12 litres**

26)$10 **27)216 packets of rice** **28)165 lollipops altogether**

29)52cm^2 **30)31.5cm^2**

Paper 2

1)24	**2)2:3:1**
3)12cm^3	**4)1000 – 350 =650** **650÷2=325** **350+325=675g**
5)12 – 4 =8 **½ x 4 x 8 = 16cm^2**	**6)9:13**
7)36÷4=9 **22÷4≈5** **18÷4≈4** **9x5x4=180** **180 cubes can be placed into the container.**	**8)Yellow→45** **Green→45÷3=15** **45+15=60** **5u→60** **1u→60÷5=12** **11u→11x12=132** **There are 132 ice cream sticks altogether sticks.**

9) ½ x 9 x 9 = 36 36 = 6x6 6 x 4 =24 The perimeter of the square is 24cm.	10)2/5 x 50 x 40 x 30 =24000 24000÷250 =96 cups.
11)8u→32 1u→32÷8=4 5u→4x5=20 There are 20 cakes in Box A.	12)3u→396(Bala at first) 1u→396÷3=132 (Carl gave to Bala) 8u→132x8=1056 (Ali at first) 7u→132x7=924 (Carl at first)
13)a)65 x 8 = 520 Cindy has $520 at first. b)520÷5=104 (clothes) 104 +65=169 (clothes and shoes) 520 – 169 =351 351÷3 =117 (bag) Cindy spent $117 on her bag.	14)21 – 16 = 5 120÷5 = 24 21x24=504 There are 504 students altogether.
15)<u>Currently</u> <u>Later</u> 8840÷8=1105 8840÷4=2210 1105x13=14365 2210x12=26520 25620 – 14365 =12155 12155 more laptops are needed.	16)a)He bought 5 packets of nasi lemak. b)He bought 25 packets of bryani rice.
17)a)She spent $2.10 on the erasers. b)She spent $28 on the stationery.	18)a)20u→420 1u→420÷20=21 7u→21x7=147 (males) 13u→21x3=273 (female) There were 273 females before the start of the concert. b)3u→147 1u→147÷3=49 8u→49x8=392 There were 392 people at the end of the concert.