



Rosyth School  
 First Continual Assessment 2009  
 Standard Mathematics  
 Primary 6

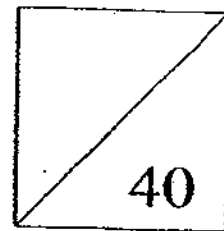
Name: \_\_\_\_\_

Class: Pr 6- \_\_\_\_\_ Register No. \_\_\_\_\_

Duration: 50 minutes

Date: 3 Mar 2009

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



**PAPER 1 (BOOKLETS A & B)**

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. For questions 1 to 15 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS).
4. You are **not** allowed to use a calculator.

Booklet	Total Marks	Marks
A	20 marks	
B	20 marks	
Paper 1 Total		

\*This paper consist of 12 pages altogether.

This paper is not to be reproduced in part or whole without the permission of the Principal.

**Booklet A**

Question 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 and 4). Shade the correct answer on the OAS  
(Optical Answer Sheet)

(20 marks)

- 1) The figure below is divided into 5 equal parts. What fraction of the figure is shaded?



- (1)  $\frac{1}{5}$
- (2)  $\frac{3}{10}$
- (3)  $\frac{3}{7}$
- (4)  $\frac{3}{5}$
- 2)  $\frac{1}{9}$  of Chew Lin's savings is \$720. What is  $\frac{1}{8}$  of her savings?
- (1) \$90
- (2) \$640
- (3) \$810
- (4) \$960

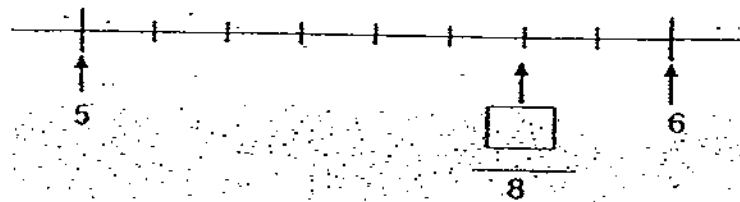
3) Kimberly is  $z$  years old. Janice is 3 times as old as Kimberly. Sean is 15 years younger than Janice. What is their total age in terms of  $z$ ?

- (1)  $(7z - 15)$  years old
- (2)  $(7z + 15)$  years old
- (3)  $(5z - 15)$  years old
- (4)  $(5z + 15)$  years old

4) Simplify the ratio 40 : 72.

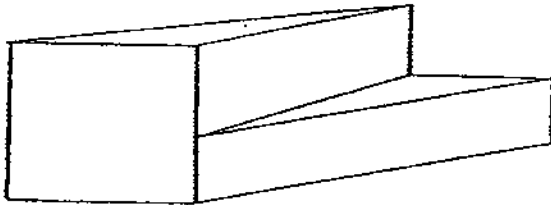
- (1) 1 : 3
- (2) 5 : 9
- (3) 4 : 11
- (4) 6 : 5

5) What is the missing numerator in the box?



- (1) 6
- (2) 40
- (3) 3
- (4) 46

6) How many faces does the figure below have?

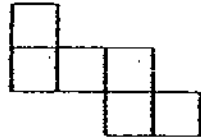


- (1) 8
- (2) 10
- (3) 11
- (4) 12

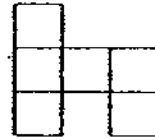
7) If  $X : Y = 3 : 7$  and  $Y : Z = 3 : 7$ , what fraction of  $X$  is  $Z$ ?

- (1)  $\frac{21}{9}$
- (2)  $\frac{49}{21}$
- (3)  $\frac{7}{3}$
- (4)  $\frac{49}{9}$

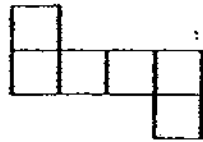
8) Which of the following nets can be folded to form a cube?



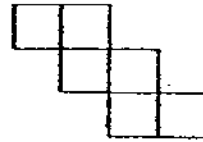
A



B



C



D

- (1) A and B only
- (2) A, B and D only
- (3) A, C and D only
- (4) All of the above

9) A factory has 1600 employees. There are 300 more male employees than female employees. Find the ratio of the number of male employees to the number of female employees working in the factory.

- (1) 13 : 16
- (2) 3 : 16
- (3) 16 : 13
- (4) 19 : 13

10) Amanda's mass is  $\frac{11}{9}$  times Natalie's mass. Find the ratio of Amanda's mass to their total mass.

(1) 11 : 9

(2) 9 : 20

(3) 11 : 20

(4) 6 : 5

11) Yvette and Andrea had 36 stalks of roses each. Yvette sold  $\frac{1}{4}$  of her roses while Andrea sold  $\frac{2}{3}$  of hers. What was the ratio of the roses left to the number of roses sold?

(1) 13 : 11

(2) 19 : 33

(3) 19 : 27

(4) 17 : 27

12) Mrs Lim gave Gerald and Ryan an equal amount of money. Gerald spent \$12. The ratio of Gerald's money to Ryan's money became 3 : 5. How much money did Mrs Lim give them altogether?

(1) \$24

(2) \$48

(3) \$60

(4) \$96

- 13) The sides of a triangle are in the ratio 3 : 4 : 5. If the longest side is 20 cm longer than the shortest side, find the perimeter of the triangle.
- (1) 48 cm
  - (2) 100 cm
  - (3) 120 cm
  - (4) 240 cm
- 14) The ratio of Kevin's mass to Natalie's mass is 4 : 3. If Kevin's mass is decreased by 4 kg and Natalie's mass is increased by 2 kg, they will have the same mass. What is Natalie's original mass?
- (1) 18 kg
  - (2) 36 kg
  - (3) 40 kg
  - (4) 48 kg
- 15) The total cost of a chair and a table is \$86. *what is the total cost of* ~~Mr Lee bought 8 chairs and 10 tables for~~ *9 such tables and 4 chairs*  
~~\$988. Find the cost of one table.~~
- (1) \$150
  - (2) \$300
  - (3) \$344
  - (4) \$688

**Booklet B**

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)  $20 \times 35 = \square \times 5$

What is the missing number in the box?

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

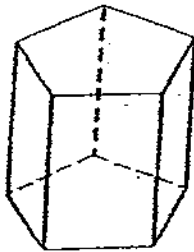
---

17)  $2a + 3 + 3a + 5 + 4 - 4a =$  \_\_\_\_\_

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

---

18) How many faces does the figure below have?



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

---

19) Shu Yan weighs  $x$  kg. Yi Yi weighs 3 kg less than Shu Yan. Find the average mass of the two girls in terms of  $x$ .

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



- 20) The total sum of 10 numbers is 60. When two new numbers are added to the sum of 60, the new average is 12. Find the sum of the two new numbers.

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

---

- 21) Ahmad ate  $\frac{1}{7}$  of a cake. He then divided the remainder into 12 equal pieces. What fraction of the whole cake is each remaining piece?

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

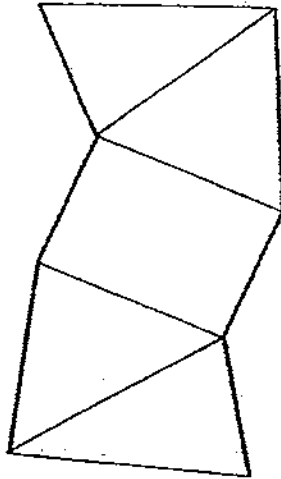
---

- 22) Meng Jin mixes 4 cups of lemon syrup with 11 cups of water to make a bottle of lemonade for his class picnic. If he used 12 cups of lemon syrup altogether, how many bottles of lemonade did he make?

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

---

- 23) What is the name of the solid with the net shown below? (the figure is not drawn to scale)



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

- 
- 24) Each rowboat at the lake can hold a maximum of 4 people. 42 students want to take a boat ride. What is the least number of rowboats needed?

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

- 
- 25) Shanna is thinking of three consecutive even numbers. The average of the first and second number is 19. The average of the second and third number is 21. List the three numbers.

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

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) If  $k = 6$ , find the value of  $\frac{3k - 5 + 2k + 8}{2k}$ . (Give your answer in its simplest form.)

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

---

- 27) There were as many men and women at a party.  $\frac{1}{4}$  of the men and  $\frac{2}{3}$  of the women wore black. What fraction of the guests did not wear black?

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

---

- 28) Patricia is younger than her father by <sup>3</sup>18 years. In 3 years' time, the ratio of Patricia's age will be 1 : 3 to her father's age. Find Patricia's present age.

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

---

- 29) A hurdler runs on a running track from the start line to the finish line for a total distance of 110 m. The first hurdle is placed 8 m away from the start line. The subsequent hurdles are placed at intervals of 8 m. What is the distance from the last hurdle to the finish line?

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

- 30) Dominic is  $h$  years old. Charles is 4 years older than Dominic. Mr Boey is 4 times as old as Dominic. In 4 years' time, what will be the total age of the three of them in terms of  $h$ ?

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

-END OF PAPER 1-



Rosyth School  
 First Continual Assessment 2009  
 Standard Mathematics  
 Primary 6

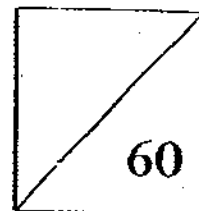
Name: \_\_\_\_\_

Class: Pr 6-\_\_\_\_\_ Register No. \_\_\_\_\_

Duration: 1h 40 minutes

Date: 3 March 2009

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



**PAPER 2**

Instructions to Pupils:

1. Follow all instructions carefully.
2. Answer all questions.
3. Write your answers in this booklet.
4. **Show your working clearly** as marks are awarded for correct working.
5. You are allowed to use a calculator.

Questions	Total Marks	Marks
Q 1 to 5	10 marks	
Q 6 to 18	50 marks	
<b>Paper 2 Total</b>		

\*This paper consist of 13 pages altogether.

This paper is not to be reproduced in part or whole without the permission of the Principal.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below 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)  $\frac{2}{3}$  of John's marbles is equal to  $\frac{3}{5}$  of Max's marbles. They have 266 marbles altogether. How many marbles does John have?

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

- 2) Murray and Nicholas shared \$280 in the ratio of 3 : 4. How much must Murray receive from Nicholas so that the ratio of their money becomes 5 : 3?

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

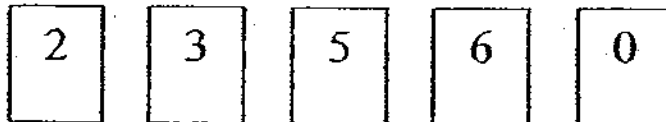
- 3) A snail moves at the rate of  $\frac{1}{5}$  m per hour. How long does it take to move  $\frac{6}{15}$  m?

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

- 4) There are 36 passengers on a bus. The ratio of the number of adults to the number of school students in the bus is 3 : 1. Half way through the journey, 3 students boarded while some adults alighted the bus. There were twice as many adults as school students then. How many adults alighted the bus?

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

- 
- 5) How many 2-digit numbers can be formed with the following digits? Use each digit once only in each number.



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. (50 marks)

- 
- 6) The total mass of a metal tin and its biscuits when completely full is 8 kg.  
When  $3\frac{1}{4}$  kg of the biscuits is taken out, it is only half full. What is the mass of the biscuits and the metal tin when it is  $\frac{1}{3}$  full? (Give your answer in its simplest form.)

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

- 
- 7) At the start of a soccer match, the number of female spectators was twice the number of male spectators. After 230 female spectators left the match, the number of male spectators was thrice the number of female spectators. What was the total number of spectators at the start of the match?

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



8)  $\frac{13}{15}$  m of ribbon is cut into shorter pieces. Each of the shorter pieces must measure  $\frac{1}{3}$  m.

(a) How many  $\frac{1}{3}$  m pieces are there?

(b) What is the length of the remaining piece? (Give your answer in its simplest form)

(a) \_\_\_\_\_ [2]

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

---

9) Kathy sold  $\frac{3}{8}$  of her school's fund-raising tickets to her brother. She sold the rest of her tickets to Michael and Raju in the ratio of 3 : 7. Find the ratio of the number of fund-raising tickets Kathy sold to her brother to the number of tickets she sold to Raju.

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

- 10) A Chinese medical shop had 50 jars containing the same number of herbs in each jar. During renovation, 15 jars were removed and their herbs were distributed equally amongst the remaining jars. As a result, there were 12 more herbs in each jar than before. How many herbs were in each jar before the renovation?

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



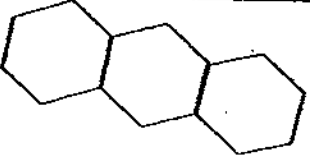
---

- 11) In 2008, the ratio of the number of boys to the number of girls in XYZ School was 5 : 3. In 2009, 455 students joined the school and there are now 3 times as many boys and 2 times as many girls as in 2008. How many children were in the school in 2008?

Ans: \_\_\_\_\_ [4]

---

- 12) The table below shows the number of matchsticks used to make the following patterns.

Figure	Pattern	Number of matchsticks
	1 <sup>st</sup>	6
	2 <sup>nd</sup>	11
	3 <sup>rd</sup>	?

- (a) How many matchsticks are needed to make the 3<sup>rd</sup> pattern?  
 (b) How many matchsticks are needed to make the 10<sup>th</sup> pattern?  
 (c) How many matchsticks are needed to make the n<sup>th</sup> pattern?

Ans: (a) \_\_\_\_\_ [1]

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

(c) \_\_\_\_\_ [1]

- 13) Lily, Mina and Oscar each donated some money to charity. The donation made by Lily was  $\frac{2}{3}$  as much as the total amount donated by Mina and Oscar. Mina donated  $\frac{1}{5}$  as much as the total amount donated by Lily and Oscar. If Oscar donated \$360 more than Mina, how much did Lily donate?

Ans: \_\_\_\_\_ [4]

- 14) Mr Tan spent \$11 760 on 8 China tour packages and 8 Bali tour packages for his family. He spent \$5 070 more than Mr Wee who bought 5 China tour packages and 2 Bali tour packages. What is the cost of one China tour package?

Ans: \_\_\_\_\_ [4]

- 15) Mark had some stamps. He pasted  $\frac{5}{11}$  of the stamps on 5 postcards and 5 envelopes. On each postcard, he pasted  $\frac{1}{4}$  as many stamps as he pasted on each envelope. If he had 150 stamps left, how many stamps did he paste on each envelope?

Ans: \_\_\_\_\_ [4]

- 16) Madam Fatimah spent \$140 on pens and erasers for her pupils as Children's Day gifts. A pen cost \$0.80 each and an eraser cost \$0.50 each. The ratio of the number of pens bought to the number of erasers bought was 5 : 6.
- a) How many pens did she buy?
  - b) How many erasers did she buy?

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

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

- 17) Ali, Bala and Charles shared a tin of cookies. Ali took  $\frac{5}{6}$  of the tin of cookies and  $\frac{1}{3}$  of a cookie. Bala took  $\frac{5}{6}$  of the remaining tin of cookies and  $\frac{1}{3}$  of a cookie. Charles received only 2 cookies. How many more cookies did Ali have than Bala?

Ans: \_\_\_\_\_ [5]



- 18) 12 athletes ran a total of 21600 m. Each male athlete ran 300 m more than each female athlete. There were 4 more male athletes than female athletes. What was the total distance ran by the male athletes?

Ans: \_\_\_\_\_ [5]

**~END OF PAPER~**

*Have you checked your work thoroughly?*

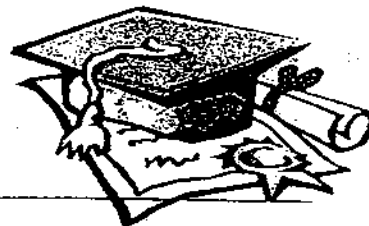


# ANSWER SHEET

## EXAM PAPER 2009

SCHOOL : ROSYTH PRIMARY  
SUBJECT : PRIMARY 6 MATHEMATICS

TERM : ~~SA1~~ CA1



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

- 16)140      17)(a+12)      18)7      19)(2x-3/2)      20)84
- 21)1/14      22)3      23)Pyramid      24)11      25)First 18 second  
20 third 22
- 26)2<sup>3</sup>/<sub>4</sub>      27)13/24      28)12      29)6      30)(6h+16)years old

### Paper 2

1) $266 \div 19 = 14$ $14 \times 9 = 126$ marbles	2) \$55
3) 2h	4) $36 \div 4 = 9$ $9 + 3 = 12$ $9 \times 3 = 27$ $12 \times 2 = 24$ $27 - 24 = 3$ adults
5) 16	6) $3\frac{1}{4} \times 2 = 6\frac{1}{2}$ $8 - 6\frac{1}{2} = 1\frac{1}{2}$ $\frac{1}{3} \times 6\frac{1}{2} = 2\frac{1}{6}$ $1\frac{1}{2} + 2\frac{1}{6} = 3\frac{2}{3}$ kg
7) $230 \div 5 = 46$ $46 \times 9 = 414$ The total number is 414 spectators.	8) a) 2 pieces b) $\frac{1}{5}$ m

<b>9)6:7</b>	<b>10)28 herbs</b>
<b>11)455 ÷ 13=35</b> <b>35x8=280</b> <b>There were 280children</b>	<b>12)a)16 matchstick</b> <b>b)51 matchstick</b> <b>c)(5h+1)</b>
<b>13)360 ÷ 8=45</b> <b>45x12=\$540</b>	<b>14)11760-5070=6690</b> <b>6690x4=26760</b> <b>26760-11760=15000</b> <b>20-8=12</b> <b>15000 ÷ 12=1250</b> <b>The cost is \$1250</b>
<b>15)150 ÷ 6=25</b> <b>25x5=125</b> <b>125 ÷ 25=5</b> <b>5x4=20</b> <b>He paste 20stamps.</b>	<b>16)a)100</b> <b>b)120</b>
<b>17)60</b>	<b>18)15200m</b>