



NAN HUA PRIMARY SCHOOL  
SEMESTRAL ASSESSMENT 1 – 2009  
PRIMARY 5

MATHEMATICS

Paper 1

Section A: 15 Multiple Choice Questions ( 20 marks )

Section B: 10 Short Answer Questions ( 20 marks )

Total Time for Paper 1: 50 minutes

**INSTRUCTION TO CANDIDATES**

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided for Questions 1-15.
6. You are not allowed to use calculator for Paper 1.

**Marks Obtained**

Paper 1		/ 40
Paper 2		/ 60
Total		/ 100

Name : \_\_\_\_\_ (      )

Class : \_\_\_\_\_

Date : 13 May 2009

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

**Section A (20 marks)**

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) and shade on the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

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1. How many ten thousands are there in 3 million?

- (1) 3
- (2) 30
- (3) 300
- (4) 3000

2. What is the best estimate for  $4\,589 \times 23$ ?

- (1)  $4\,000 \times 20$
- (2)  $4\,000 \times 30$
- (3)  $5\,000 \times 20$
- (4)  $5\,000 \times 30$

3. What of the following gives the value of 1 million?

- (1)  $250 \times 400$
- (2)  $1\,250 \times 80$
- (3)  $20 \times 50\,000$
- (4)  $3\,000\,000 \div 30$

4. Find the value of  $80 - (20 + 16) \div 4$

- (1) 19
- (2) 56
- (3) 64
- (4) 71

5. Aunt Beatrice shared  $\frac{3}{4}$  of a cake equally among 6 friends.  
What fraction of the cake does each of her friends get?

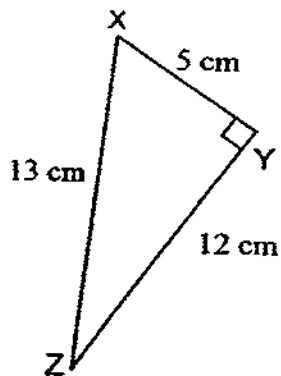
(1)  $\frac{1}{6}$

(2)  $\frac{1}{8}$

(3)  $\frac{18}{4}$

(4) 18

6. In the figure below (not drawn to scale), find the area of the triangle XYZ.



- (1)  $30 \text{ cm}^2$   
(2)  $60 \text{ cm}^2$   
(3)  $78 \text{ cm}^2$   
(4)  $156 \text{ cm}^2$

7.  $107 \times 20 = 2\,140$   
 $107 \times 21 = 2\,140 + \underline{\hspace{2cm}}$

- (1) 20  
(2) 21  
(3) 107  
(4) 2\,140

8. Which of the letters below has parallel lines and perpendicular lines?

(1) **T**

(2) **A**

(3) **M**

(4) **E**

9. Express 3.48 as a fraction in its simplest form.

(1)  $3\frac{6}{12}$

(2)  $3\frac{12}{25}$

(3)  $3\frac{24}{50}$

(4)  $3\frac{48}{100}$

10. In 72.349, the digit '9' is in the \_\_\_\_\_ place.

(1) ones

(2) tenths

(3) hundredths

(4) thousandths

11. The perimeter of a triangle is 120 cm. If the ratio of the 3 sides is 2 : 3 : 5, what is the length of the shortest side?

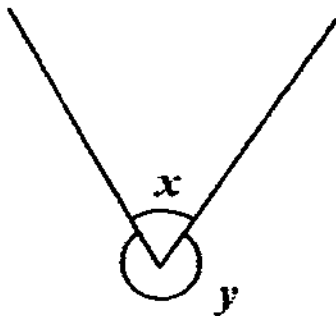
- (1) 12 cm
- (2) 24 cm
- (3) 36 cm
- (4) 60 cm

12. The following table shows the collection of donations during a funfair. What is the ratio of the amount of money collected by Freda to the amount of money collected by Halim?

Class	Amount collected
Eng Kim	\$100
Freda	\$270
Gopal	\$150
Halim	\$90

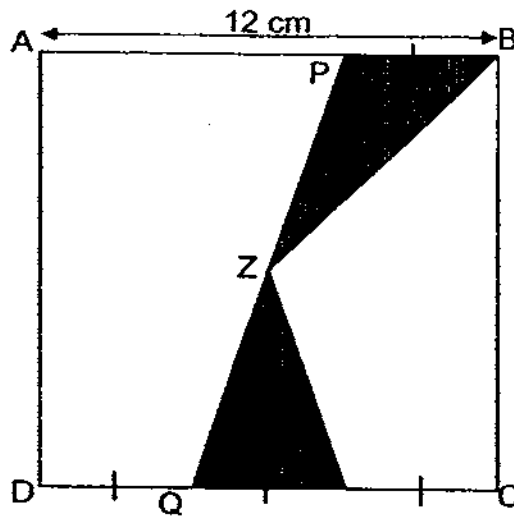
- (1) 3 : 1
- (2) 5 : 1
- (3) 3 : 5
- (4) 10 : 9

13. In the figure below (not drawn to scale), the ratio of the size of  $\angle x$  to  $\angle y$  is 1 : 5. What is the value of  $\angle x$ ?



- (1)  $30^\circ$
- (2)  $60^\circ$
- (3)  $300^\circ$
- (4)  $360^\circ$

14. ABCD is a square. Point Z is the centre of the square. PQ is a straight line. Find the area of the shaded part.



- (1)  $12 \text{ cm}^2$   
 (2)  $24 \text{ cm}^2$   
 (3)  $72 \text{ cm}^2$   
 (4)  $144 \text{ cm}^2$
15. 64 pots of plants were spaced out equally around a square garden. How many pots of plants were there on each side of the square garden?

- (1) 15  
 (2) 16  
 (3) 17  
 (4) 18

**Section B (20 marks)**

Questions 16 to 25 carry 1 mark each. Questions 26 to 30 carry 2 marks each. For each question from 26 to 30, show your workings clearly in the space below it and write your answer in the space provided. Give your answers in the units stated.

16. Write 7 419 011 in words.

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17. Adam went for a midnight movie that started at 11.35 p.m.. <sup>He</sup> She came out of the movie at 1.25 am. How long did the movie last?

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

18.  $2\frac{3}{4} = \frac{\square}{20}$  What is the missing number in the box?

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

19. Complete the number pattern.

38 057, \_\_\_\_\_, 37 757, 37 607

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

20. In the Art Club,  $\frac{3}{5}$  of the members are girls. What is the ratio of the number of girls to the number of boys?

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

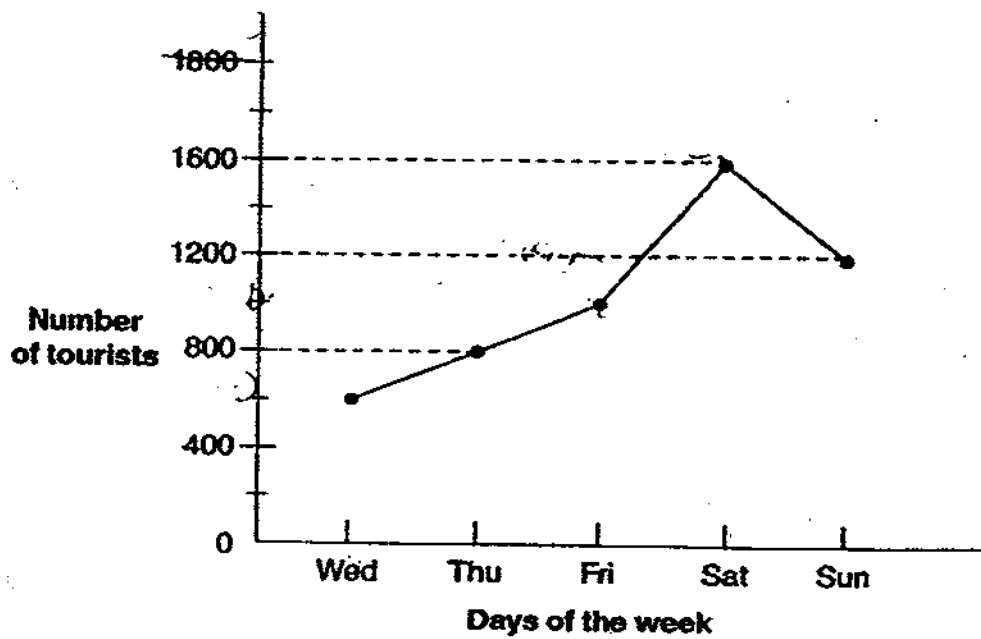
21. Bryan, Clifford and Dave shared a number of marbles in the ratio of 5 : 7 : 3. Bryan and Dave had a total of 104 marbles. How many marbles did Clifford have?

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

22. Express  $2\frac{2}{3}$  h in minutes.

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

23. The line graph below shows the number of tourists who visited a zoo. How many more visitors visited the zoo on Saturday than on Friday?



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

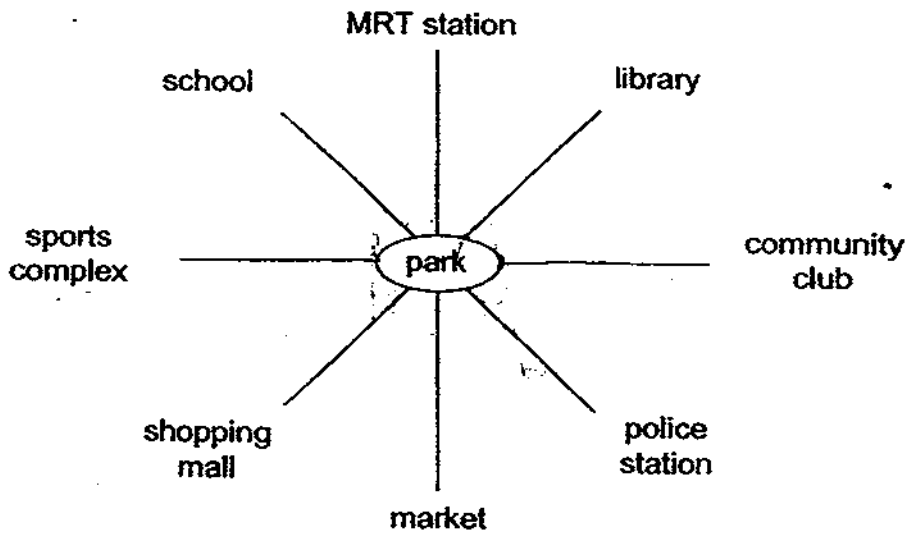


24. Use the following digits to form the smallest possible 4-digit odd number.

0 2 9 1

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

25. Xavier was at the park facing the MRT station. If he made a  $135^\circ$  turn in the anti-clockwise direction, he would be facing the \_\_\_\_\_.

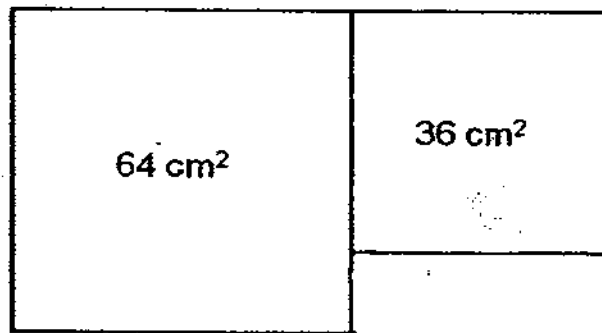


Ans: \_\_\_\_\_

26. A bottle weighs 170 g when it is  $\frac{1}{2}$  filled with water. It weighs 130 g when it is  $\frac{1}{3}$  filled with water. What is the mass of the empty bottle?

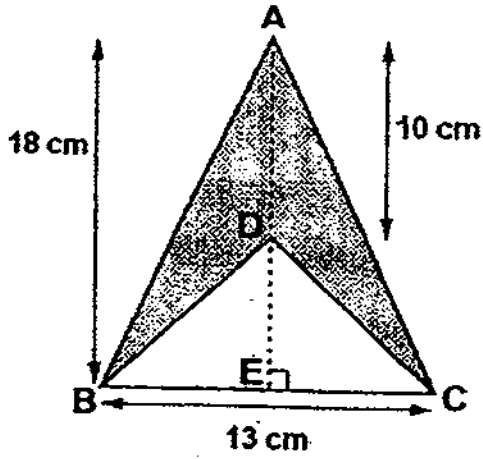
Ans: \_\_\_\_\_ g

27. The figure below is made up of 2 squares. Find the perimeter of the whole figure.



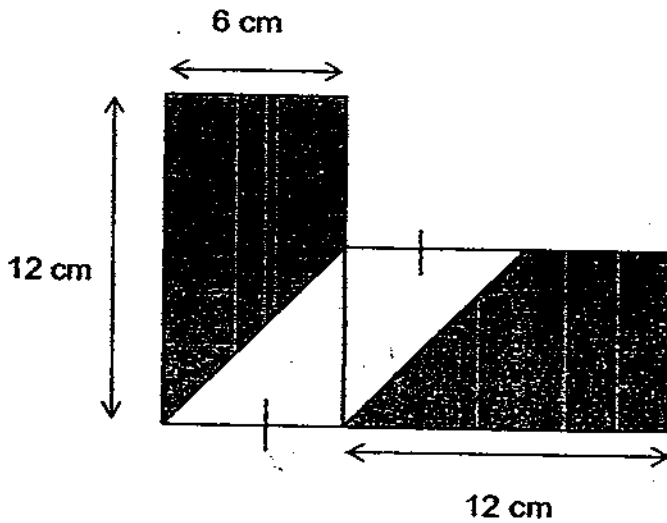
Ans: \_\_\_\_\_ cm

28. AE is 18 cm. AD is 10 cm. BC is 13 cm.  
Find the area of the shaded part of the figure.



Ans : \_\_\_\_\_ cm<sup>2</sup>

29. The figure is made up of 2 identical rectangles. Find the area of the shaded parts.



Ans : \_\_\_\_\_ cm<sup>2</sup>

30. A carpenter was building a bridge across a river. On the first day, he built 24 m of the bridge. On the second day, he built  $\frac{2}{5}$  of the remainder. How long was the bridge if the total length he had built on the first 2 days was equal to the remaining length of the bridge to be built?

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

End-of-Paper 1



**NAN HUA PRIMARY SCHOOL  
SEMESTRAL ASSESSMENT 1 – 2009  
PRIMARY 5**

**MATHEMATICS**

**Paper 2**

**Total Time for Paper 2: 1 hour 40 minutes**

**INSTRUCTION TO CANDIDATES**

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully
4. Answer all questions and show your workings clearly.
5. You are allowed to use a calculator.

**Marks Obtained**

<b>Total</b>		<b>/ 60</b>
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**Name :** \_\_\_\_\_ )

**Class :** \_\_\_\_\_

**Date : 13 May 2009**

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

**Paper 2 (60 marks)**

Questions 1 to 5 carry 2 marks each. Show your workings clearly in the space below it and write your answer in the space provided. Give your answers in the units stated.

1. Cheryl is 15 kg heavier than Joyce. Their total mass <sup>is</sup> 133 kg. What is Cheryl's mass?

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

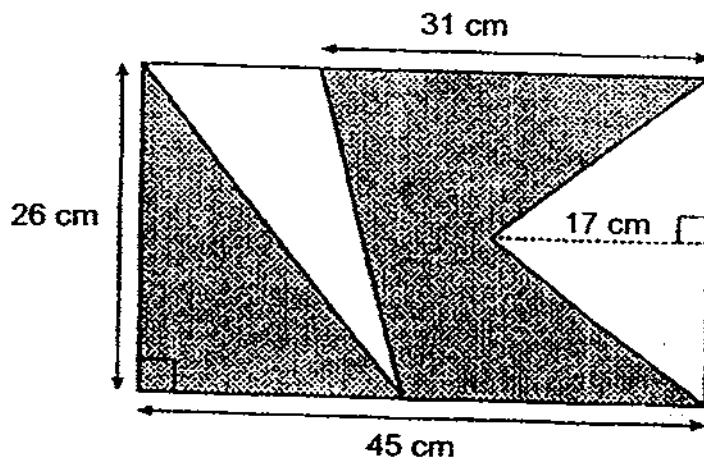
2.  $\frac{5}{9}$  of Mr Ng's salary is \$3150. How much does he earn per month?

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

3. The ratio of Peter's height to his father's height is 8 : 11. If Peter is 48 cm shorter than his father, what is Peter's height?

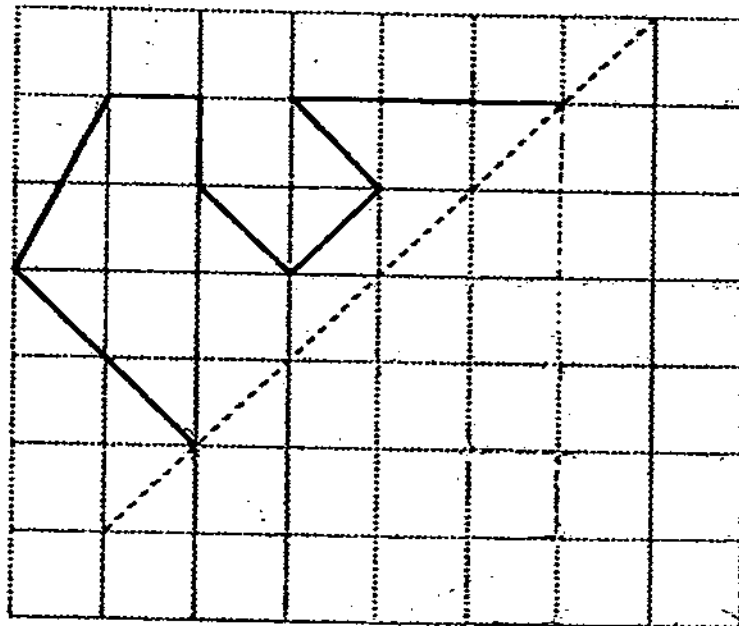
Ans: \_\_\_\_\_ cm

4. Find the area of the shaded figure below.



Ans : \_\_\_\_\_ cm<sup>2</sup>

5. Complete the figure so that the dashed line is a line of symmetry of the figure.

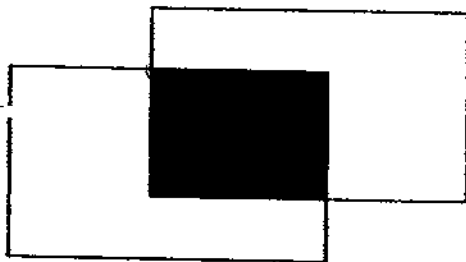


For each question from 6 to 18, show your workings clearly in the space below it and write your answer in the space provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. Remember to include the units wherever possible.

6. The total mass of 3 sacks of rice is 205 kg. The mass of sack A is 15 kg less than sack B. The mass of sack C is 25 kg heavier than sack B. Find the mass of sack C.

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

7. The figure below, not drawn to scale, shows 2 overlapping similar rectangles.  $\frac{4}{9}$  of each rectangle is shaded. Express the shaded area as a ratio of the whole figure.



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

8. A frog makes 18 leaps across the lily pads on a pond which are of the same distance apart. It takes the frog 3 seconds to get from the 1<sup>st</sup> lily pad to the 3<sup>rd</sup> lily pad. How long does it take for the frog to leap from the 1<sup>st</sup> lily pad to the 9<sup>th</sup> lily pad?

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



9. Sally went to an IT fair with a sum of money. She spent  $\frac{3}{7}$  of the money on a camera and  $\frac{2}{5}$  of the remainder on a printer. If she had \$456 left, how much money did she have at first?

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

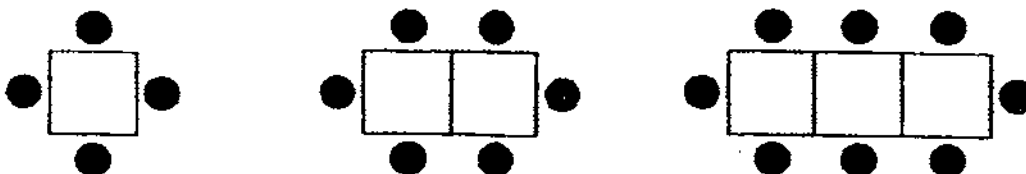
10. There are some hamsters and birds on sale in a pet shop. These animals have a total of 50 heads and 134 legs. How many birds are there in the pet shop?

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

11. The ratio of the number of Dan's storybooks to that of Edward's is 5 : 7.  
The ratio of the number of Edward's storybooks to that of Fred is 4 : 3.  
If the 3 boys have 552 storybooks altogether, how many storybooks does Fred have?

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

12. The tables and chairs at a buffet restaurant are arranged as shown below.



Based on the arrangements shown, complete the blanks in the table below.

Number of tables	Number of chairs
1	4
2	6
3	8
...	...
8	( a )
...	...
( b )	40

- (c) To seat a group of 110 diners together, how many tables must be joined together in a row?

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

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

Ans: (c) \_\_\_\_\_ [2]

13. The price of concert tickets for 2 adults and 3 children is \$57.  
The cost of 4 adults and 2 children is \$82.  
(a) What is the cost of an adult ticket?  
(b) Find the total cost of tickets for a group of 2 adults and 30 children.

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

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

14. Anne, Ben and Carol shared \$135. During a shopping trip, Anne spent  $\frac{3}{5}$  of her money, Ben spent  $\frac{3}{4}$  of his money and Carol spent  $\frac{2}{3}$  of her money. Given that all three of them spent the same amount of money, find the total amount of money they had left.

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

15. There were an equal number of boys and girls in the school hall for a concert performance.

After 980 girls and 350 boys left, there were 6 times as many boys as girls remaining in the hall.

- (a) What was the total number of children in the hall at first?
- (b) Express the remaining number of girls as a fraction of the total number of children in the end. Express your answer in the simplest form.

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

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

16. The ratio of the number of mangoes to the number of oranges that a fruit seller had was 5 : 11. After he sold half of the oranges, there were a total of 252 mangoes and oranges left at the fruit stall.
- (a) How many mangoes were there at the stall?
- (b) If he sold the remaining oranges in bags of 6 at \$3.50 per bag, how much would he receive for them?

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

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

17. Jane had some stickers. She gave Harry half of her stickers and 1 additional sticker. She gave Tammy half of the remaining stickers and 3 additional stickers. If Jane has 18 stickers left after this, how many stickers did she have at first?

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

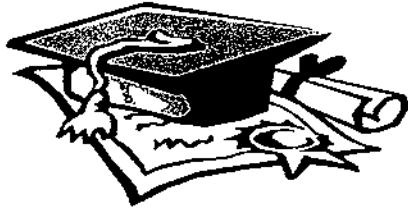
18. William had some money. After spending \$30 on 4 key chains and 4 mugs, he would be short of \$0.80 if he were to buy another mug. However, if he were to buy one more key chain, he would still have \$0.70 left.
- (a) How much did a mug cost?
  - (b) How much money did William have at first?

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

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

End-of-Paper



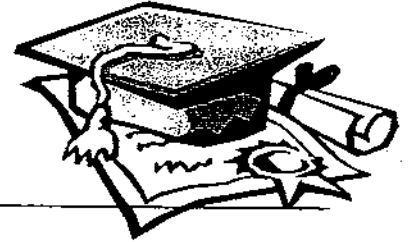


# ANSWER SHEET

**EXAM PAPER 2009**

**SCHOOL : NAN HUA 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	4	2	1	3	4	2	4	2	1	2	2	3

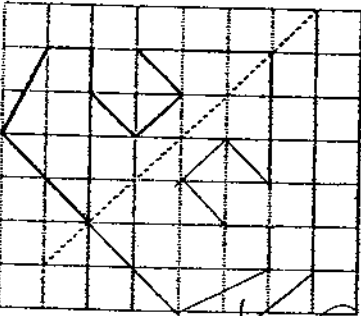
16) Seven million, four hundred and nineteen thousand and eleven.

17) 1h 50 min    18) 55    19) 37907    20) 3:2    21) 91 marbles    22) 160min

23) 600    24) 1029    25) shopping mall    26) 50g    27) 44cm    28) 65cm<sup>2</sup>

29) 108cm<sup>2</sup>    30) 144m

## Paper 2

1) $133 - 15 = 118$ $118 \div 2 = 59$ $59 + 15 = 74\text{kg}$	2) $3150 \div 5 = 630$ $630 \times 9 = \$5670$
3) $11 - 8 = 3$ $48 \div 3 = 16$ $16 \times 8 = 128\text{cm}$	4) $45 \times 26 = 1170$ $\frac{1}{2} \times 17 \times 26 = 221$ $14 \times 26 \times \frac{1}{2} = 182$ $182 + 221 = 403$ $1170 - 403 = 767\text{cm}^2$
5) 	6) $15 + 15 + 25 = 55$ $205 - 55 = 150$ $150 \div 3 = 50$ $50 + 40 = 90\text{kg}$ The mass is 90kg

<p>7) <math>2:7</math></p>	<p>8) <math>3 \div 2 = 1.5</math>  <math>19 - 1 = 18</math>  <math>1.5 \times 18 = 27</math>  The will take the frog 27 seconds</p>
<p>9) <math>456 \div 3 = 152</math>  <math>152 \times 5 = 760</math>  <math>760 \div 4 = 190</math>  <math>190 \times 7 = \\$1330</math>  She had \$1330 at first.</p>	<p>10) <math>50 \times 2 = 100</math>  <math>134 - 100 = 34</math>  <math>34 \div 2 = 17</math>  <math>50 - 17 = 33</math>  There are 33 birds.</p>
<p>11) D : E    E : F  5 : 7    4 : 3  20 : 28    28 : 21</p> <p><math>20 + 28 + 21 = 69</math>  <math>552 \div 69 = 8</math>  <math>8 \times 21 = 168</math>  He has 168 storybooks</p>	<p>12) a) <math>8 + 2 + 2 + 2 + 2 + 2 = 18</math> chairs  b) 19 table.  c) 54</p>
<p>13) a) \$16.50  b) \$273</p>	<p>14) \$45</p>
<p>15) a) <math>980 - 350 = 630</math>  <math>630 \div 5 = 126</math>  <math>126 \times 7 = 882</math>  <math>882 + 980 + 350 = 2212</math>  The total number is 2212.  b) <math>126 / 882 = 1/7</math>  The fraction is <math>1/7</math></p>	<p>16) a) <math>11 \div 2 = 5.5</math>  <math>252 \div 10.5 = 24</math>  <math>24 \times 5 = 120</math>  There were 120 mangoes</p> <p>b) <math>132 \div 6 = 22</math>  <math>22 \times 3.50 = 77</math>  He would receive \$77</p>
<p>17) <math>1u \rightarrow 18 + 3 = 21</math>  <math>2u \rightarrow 21 \times 2 = 42</math>  <math>1u \rightarrow 42 + 1 = 43</math>  <math>43 \times 2 = 86</math>  She had 86 stickers.</p>	<p>18) a) \$4.50  b) \$33.70</p>