



**NAN HUA PRIMARY SCHOOL  
CONTINUAL ASSESSMENT 1 – 2011  
PRIMARY 6**

**MATHEMATICS**

**Paper 1**

**Section A: 15 Multiple Choice Questions ( 20 marks )**

**Section B: 15 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**

<b>Paper 1</b>	<b>Booklet A</b>		<b>/ 40</b>
	<b>Booklet B</b>		
<b>Paper 2</b>			<b>/ 60</b>
<b>Total</b>			<b>/ 100</b>

**Name :** \_\_\_\_\_ (      )

**Class : 6** \_\_\_\_\_

**Date : 1 March 2011**

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

**Section A (20marks)**

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.

1. What is the value of digit '7' in 10.706?

- (1)  $7 \times 100$
- (2)  $7 \times 10$
- (3)  $7 \times 0.1$
- (4)  $7 \times 0.01$

2. How ~~may~~<sup>many</sup> eighths are there in  $2\frac{1}{4}$  ?

- (1) 9
- (2) 10
- (3) 14
- (4) 18

3. Simplify  $18 - 12 \div 3 \times 2$ .

- (1) 1
- (2) 10
- (3) 28
- (4) 4

4. When a number is rounded off to the nearest tenth, the answer is 8.7. Which of the following could be the number?

- (1) 8.64
- (2) 8.75
- (3) 8.649
- (4) 8.651

5. I spent 20% of my money. I had \$20 left. How much did I have at first?

- (1) \$16
- (2) \$25
- (3) \$40
- (4) \$100

6. What percentage of 4 m is 30 cm?

- (1) 2.5%
- (2) 7.5%
- (3) 25%
- (4) 75%

7. The surface area of a cube is  $216 \text{ m}^2$ . Find the length of its side.

- (1) 5 cm
- (2) 6 cm
- (3) 7 cm
- (4) 8 cm

8.  $2\frac{1}{5} = \square : 5$ . What is the number in the box?

- (1) 7
- (2) 8
- (3) 10
- (4) 11

9. Jack has 3 times as many sweets as Alice.

Tim has 2 times as many sweets as Jack.

What is the ratio of Jack's sweets to Alice's sweets to Tim's sweets?

(1) 3 : 2 : 1

(2) 3 : 1 : 6

(3) 6 : 3 : 1

(4) 3 : 6 : 1

10. The ratio of boys to girls in a class is 3: 2.

There are 45 pupils in the class.

How many girls are there?

(1) 9

(2) 18

(3) 27

(4) 40

11. The perimeter of a square is  $\frac{4}{5}$  m. What is its area?

(1)  $\frac{1}{4}$  m<sup>2</sup>

(2)  $\frac{1}{5}$  m<sup>2</sup>

(3)  $\frac{1}{16}$  m<sup>2</sup>

(4)  $\frac{1}{25}$  m<sup>2</sup>

12. The usual price of a soft toy is \$40. Shane bought it at a discount of 15%.  
How much did he pay for it?

- (1) \$6
- (2) \$25
- (3) \$34
- (4) \$38

13. The area of a rectangle is  $192 \text{ cm}^2$ . The ratio of its length to its breadth is 3 : 1.  
What is its length?

- (1) 24 cm
- (2) 36 cm
- (3) 48 cm
- (4) 72 cm

14. The average mass of 2 boys is 48 kg. The difference in their mass is 14 kg.  
What is the mass of the heavier boy?

- (1) 34 kg
- (2) 41 kg
- (3) 45 kg
- (4) 55 kg

15. How many 2-cm cubes can be put into a container 10 cm by 8 cm by 5 cm?

- (1) 200
- (2) 100
- (3) 50
- (4) 40

**Section B (20 marks)**

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. The side of an equilateral triangle is 27 cm. What is its perimeter?

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

17. Ah Meng and Ah Huat shared a sum of money in the ratio of 11 : 9.

What percentage of the money did Ah Huat receive?

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

18. I am an odd number greater than 3. I am a multiple of 3 and a factor of 36.

What am I?

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

19. What is  $\frac{3}{4} \div \frac{2}{3}$ ? Give your answer as a mixed number.

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

20. 2 litres of water is poured into 3 similar bottles.

What is the capacity of each bottle?

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

Subtotal	15
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21. The base of a triangle is 8 cm and its height is 6 cm.

What is the area of 10 such triangles?

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

22. Ken spent  $\frac{1}{2}$  of his money on food and  $\frac{1}{8}$  of the remainder on transport.

How fraction of the money had he left?

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

23. In this number sequence below, what is the missing number in the box?

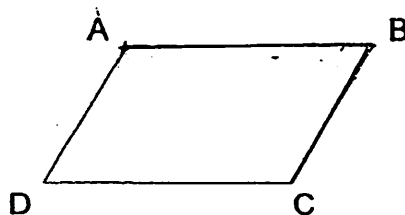
1, 8,  , 64,

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

24. A square table can seat 4 people. How many such tables, arranged to form a long rectangular table, are needed to seat 48 people?

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

25. ABCD is a parallelogram. If  $\angle ABC$  is  $73^\circ$ , what is  $\angle BAD$ ?



Ans : \_\_\_\_\_°

6

Subtotal	/ 5
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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 each questions which require units, give your answers in the units stated. [10 marks]

26. Amy has  $\frac{2}{5}$  as much money as Benny.

Benny has  $\frac{1}{4}$  as much money as Candy.

How is the ratio of Amy's money to Benny's money to Candy's money?

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

Do not write  
in this space

27. The distance between the 2<sup>nd</sup> and the 5<sup>th</sup> lamp post is 36 m.

What is the distance between the 1<sup>st</sup> and the 10<sup>th</sup> lamp post?

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

Subtotal	/ 4
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Do not write  
in this space

28. Danny bought 6 pens, 3 books and a file for \$85.

1 pen and 1 book cost \$15.

1 pen and 1 file cost \$18.

What was the cost of 2 pens?

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

29.  $\frac{2}{3}$  of Joanne's money is equal to  $\frac{3}{4}$  of Sharon's money.

Express Sharon's money as a ratio of Joanne's money.

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

30. Jenny has 80 stamps. Joey has 30 stamps. By how many percent fewer are Joey's stamps than Jenny's stamps?

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

Subtotal

/ 6

END OF PAPER



NAN HUA PRIMARY SCHOOL  
CONTINUAL ASSESSMENT 1 – 2011  
PRIMARY 6

MATHEMATICS

Paper 2

Total Time for Paper 2: 1 hour 40 minutes

5 Short Answer Questions (10 marks)

13 Structured / Long Answer Questions (50 marks)

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

Total..		/ 60
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Name : \_\_\_\_\_ ( )

Class : 6 \_\_\_\_\_

Date : 1 March 2011

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

**Section A (10 marks)**

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.

1. Wendy's first test score was 80. Her second test score was 95.  
Find the percentage increase in her score.

Ans : \_\_\_\_\_% [2m]

Do not write  
in this space

2. What is the difference between  $\frac{3}{4}$  and  $\frac{1}{8}$ ?  
Give your answer as a decimal.

Ans : \_\_\_\_\_ [2m]

3. The ratio of John's pencils to Peter's pencils was 4:5.  
If Peter gave half his pencils to John, what would be the new ratio of John's pencils to Peter's pencils?

Ans : \_\_\_\_\_ [2m]

4. The ratio of pupils in class A to those in class B was 4 : 5.  
After 2 pupils were transferred from class A to class B, the ratio became 2 : 3. How many pupils were in class A at first?

Ans : \_\_\_\_\_ [2m]

5. If 5% of a sum of money is \$80, find the value of 80% of the money.

Ans : \$ \_\_\_\_\_ [2m]

**Section B (50 marks)**

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 the brackets [ ] at the end of each question or part question. Remember to include the units wherever possible.

6. Mr Lee has some sweets. He wants to give them to his pupils.  
If he gives 5 sweets to each of his pupils, he will have 20 sweets left.  
If he gives 6 sweets to each of his pupils, he will need 16 more sweets. How many pupils are there?

Do not write in this space

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

7. I have some red and blue ribbons in a bottle.  
If I add in 20 red ribbons, 60% of my ribbons are blue.  
If I add in another 60 blue ribbons, 75% of my ribbons are blue.  
How many ribbons have I in the bottle?

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

8. The average mass of a group of 5 children is 34. When Jonah joins the group, the average mass becomes 35. What is Jonah's mass?

Do not write  
in this space

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

9. The sum of 5 consecutive numbers is 465.  
What is the smallest number?

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

10. Tammy is 8 years old.  
Her father is 38 years old.

In how many years' time will Tammy's age be  $\frac{1}{3}$  of her father's?

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

11. Rectangle A overlaps with rectangle B. Rectangle A is twice the size of Rectangle B. If  $\frac{1}{3}$  of rectangle B overlaps with rectangle A, what fraction of rectangle A overlaps with rectangle B?

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

12. Mr Yeo always gives 80% of his money to his wife. However, his income for this month was 35% less than last month. As a result, the amount of money he gave to his wife decreased by \$175. What was his income last month?

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

13. In a club, the ratio of women to men was 2 : 3.  
3 more women and 2 more men joined the club.  
The ratio of women to men then became 3 : 4.  
How many men were there in the club at first?

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

14. My salary is  $\frac{1}{5}$  more than my sister but 20% less than my brother.

If our total salary is \$11 100, what is my sister's salary?

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

15. A farm has some ducks and cows.

The ratio of the number of animals to the total number of legs is 8 : 23.

Express the number of ducks as a fraction of the cows.

Give your answer in the simplest form.

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

16. Observe the following number pattern.

1  
3 5 7  
9 11 13 15 17  
19 21   27 29 31

.....

- (a) What are the numbers in the boxes?
- (b) What is the first number in line 5?
- (c) How many numbers are there in line 99?

Ans : (a) \_\_\_\_\_ [2m]  
(b) \_\_\_\_\_ [1m]  
(c) \_\_\_\_\_ [2m]

17. Alex, Brad and Clara shared some erasers in the ratio 4 : 5 : 6 at first. During a game, Brad won  $\frac{1}{4}$  of Alex's erasers while Clara lost 10 erasers to Brad. As a result, Alex now has  $\frac{3}{4}$  as many erasers as Clara. How many erasers did each of them have at first?

Ans : Alex: \_\_\_\_\_  
Brad: \_\_\_\_\_  
Clara: \_\_\_\_\_

[5m]

18. Mrs Samy had a sum of money to spend. She spent  $\frac{1}{2}$  of her money plus \$4 on a handbag. She then spent  $\frac{1}{2}$  of the remaining money plus \$2 on a pair of shoes. Finally she spent  $\frac{2}{3}$  of what was left plus \$1 on a skirt. She was then left with \$11.

(a) How much did each item cost?

(b) How much money did she have at first?

Ans : (a) Skirt: \_\_\_\_\_

Shoes: \_\_\_\_\_

Handbag: \_\_\_\_\_

(b) \_\_\_\_\_

[5m]

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END OF PAPER

# ANSWER SHEET

**EXAM PAPER 2011**

**SCHOOL : NAN HUA PRIMARY**  
**SUBJECT : PRIMARY 6 MATHEMATICS**

**TERM : CA1**

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

- |                       |         |         |                                  |          |
|-----------------------|---------|---------|----------------------------------|----------|
| 16)81cm               | 17)45%  | 18)9    | 19)1 <sup>1</sup> / <sub>8</sub> | 20)2/3   |
| 21)240cm <sup>2</sup> | 22)7/16 | 23)125  | 24)23 tables                     | 25)107°  |
| 26)2:5:20             | 27)108m | 28)\$22 | 29)8:9                           | 30)62.5% |

**Paper 2**

<p>1) <math>95 - 80 = 15</math>  <math>15/80 = 18.75\%</math></p>	<p>2) <math>3/4 - 1/8 = 5/8 = 0.625</math></p>
<p>3) John : Peter  <math>4 : 5</math>  <math>8 : 10</math>  <math>= 13 : 5</math></p>	<p>4) A : B  <math>4 : 5</math>  <math>20 : 25</math>  <math>\begin{matrix} -2 &amp; +2 \\ 2 : &amp; 3 \\ 18 : &amp; 27 \end{matrix}</math>  <math>2u \rightarrow 2</math>  <math>20u \rightarrow 20</math> pupils</p>
<p>5) 5% --&gt; \$80              80% --&gt; \$1280</p>	<p>6) <math>5X + 20 = 6X - 16</math>  <math>\rightarrow 5X = 6X - 16 - 20</math>  <math>X \rightarrow 16 + 20 = 36</math> pupils</p>
<p>7) <math>5 \times 20 + 20 \times 4 = 180</math> ribbons.</p>	<p>8) <math>5 \times 34 = 170</math>  <math>6 \times 35 = 210</math>  <math>210 - 170 = 40</math>kg</p>

<p>9) <math>5u \rightarrow 465 - (4+3+2+1)</math>  <math>= 465 - 10 = 455</math>  <math>1u \rightarrow 455 \div 5 = 91</math></p>	<p>10) <math>38 - 8 = 30</math>  <math>30 \div 2 = 15</math>  <math>15 - 8 = 7 \text{ years' time}</math></p>
<p>11) B/ overlap : not overlap  1 : 2  <span style="margin-left: 40px;">}</span>  <span style="margin-left: 40px;">3</span>  A/ overlap : not overlap  1 : 5  <span style="margin-left: 40px;">}</span>  <span style="margin-left: 40px;">6</span></p>	<p>12) <math>100\% - 35\% = 65\%</math>  <math>80\% \times 65\% = 52\%</math>  <math>80\% - 52\% = 28\%</math>  <math>28\% \rightarrow \\$175</math>  <math>100\% \rightarrow 175/28 \times 100 = \\$625</math></p>
<p>13) <math>8u + 12 = 9u + 6</math>  <math>\rightarrow 8u = 9u + 6 - 12</math>  <math>\rightarrow 8u = 9u - 6</math>  <math>1u \rightarrow 6</math>  <math>3u \rightarrow 6 \times 3 = 18 \text{ men}</math></p>	<p>14) <math>100\% + 120\% + 150\% = 370\%</math>  <math>370\% \rightarrow \\$11100</math>  <math>1\% \rightarrow \\$30</math>  <math>100\% \rightarrow \\$30 \times 100 = \\$3000</math></p>
<p>15) <math>9/7 = 12/7</math></p>	<p>16) a) 23, 25  b) 33  c) 197</p>
<p>17) <math>2u \rightarrow 10</math>  <math>1u \rightarrow 5</math>  A <math>\rightarrow 4 \times 5 = 20</math>  B <math>\rightarrow 5 \times 5 = 25</math>  C <math>\rightarrow 6 \times 5 = 30</math></p>	<p>18) handbag <math>\rightarrow \\$160 - \\$76 = \\$84</math>  Shoes <math>\rightarrow \\$76 - \\$36 = \\$40</math>  Skirt <math>\rightarrow \\$36 - \\$11 = \\$25</math>  a) Skirt = \$25  Shoes = \$40  Handbag = \$84  b) \$160</p>