



NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 2 – 2011
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 : 24 August 2011

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.

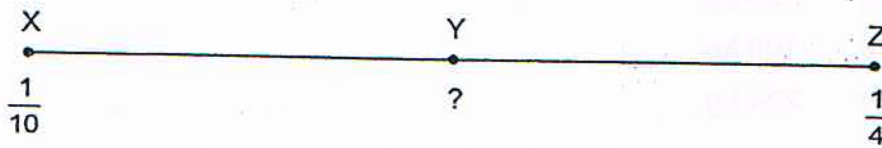
1. A plane flew from Singapore to South Africa. The total distance travelled was 8 761 589 m. Round off this distance to the nearest 1000 m.
- (1) 8 760 000 m
 - (2) 8 761 000 m
 - (3) 8 761 600 m
 - (4) 8 762 000 m
2. How many quarters are there in $9\frac{1}{2}$?
- (1) 19
 - (2) 22
 - (3) 36
 - (4) 38
3. What is 0.007 expressed as a percentage?
- (1) 0.007%
 - (2) 0.07%
 - (3) 0.7%
 - (4) 7%
-

4. Find the value of $60 + (7 - 2)^5 - 20 + 5 \times 2$.
- (1) 18
 - (2) 57
 - (3) 63
 - (4) 122
5. The ratio of Ali's mass to Bala's mass is 4 : 3. If Bala's mass is 96 kg, what is their total mass?
- (1) 72 kg
 - (2) 128 kg
 - (3) 168 kg
 - (4) 224 kg
6. How many metres are there in 67.08 km?
- (1) 6708 m
 - (2) 6780 m
 - (3) 67080 m
 - (4) 67800 m
7. Cathy had $\frac{5}{9}$ kg of sugar. She packed the sugar equally into 3 bags. What is the mass of sugar in each bag?
- (1) $\frac{5}{27}$ kg
 - (2) $\frac{3}{5}$ kg
 - (3) $1\frac{2}{3}$ kg
 - (4) $5\frac{2}{5}$ kg

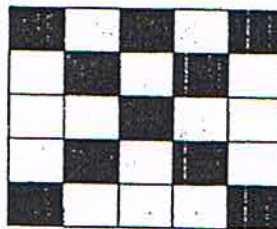
8. Mrs Devi had 2 boxes of chocolates. She ate 2 chocolates and had 46 chocolates left. Which expression below shows the number of chocolates in each box at first?

- (1) $(46 + 2) \div 2$
- (2) $(46 - 2) \div 2$
- (3) $46 + 2 \div 2$
- (4) $46 - 2 \div 2$

9. In the number line below, X represents $\frac{1}{10}$, Z represents $\frac{1}{4}$ and Y is halfway between X and Z. What fraction is represented by Y?



- (1) $\frac{1}{20}$
 - (2) $\frac{7}{20}$
 - (3) $\frac{3}{40}$
 - (4) $\frac{7}{40}$
10. The figure below is made up of identical rectangles. What is the ratio of the number of shaded parts to the number of unshaded parts?



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

11. Esther's mother gave her a list of fruits to buy. However, part of the paper was torn as shown below.

<u>Types of fruit</u>	<u>Number of fruits</u>
Oranges	10
Pears	20
Apples	

40% of the total number of fruits that Esther has to buy are apples. How many apples must she buy?

- (1) 10
(2) 20
(3) 50
(4) 60
12. What is the missing number in the box below?

$$\square : 16 = 35 : 40$$

- (1) 7
(2) 8
(3) 11
(4) 14

13. In a theatre, the seats were arranged in rows with the same number of seats in each row. From where Sally was sitting, there were 8 seats to her right and 4 seats to her left. In front of her were 6 rows of seats and behind her, there were 10 rows of seats. What is the seating capacity of the theatre?

- (1) 187
(2) 192
(3) 201
(4) 221

14. Flora used the letters and shape to form a pattern as shown below.

i ♥ N H P S i ♥ N H P S i ♥ N H ?

↑
1st

↑
58th

What would appear at the 58th position?

- (1) ♥
(2) N
(3) H
(4) P
15. A cubic tank of sides 40 cm is filled with 8 litres of water. How much more water is needed to fill the tank completely?
- (1) 5 l
(2) 8 l
(3) 32 l
(4) 56 l

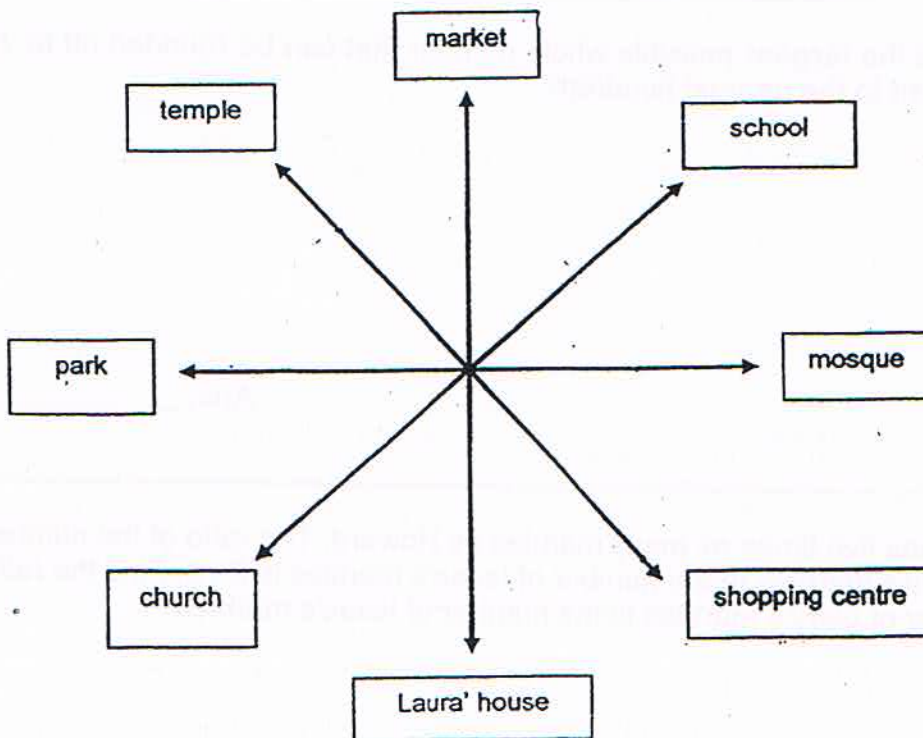
Section B (20 marks)

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. The area of a rectangular field is 169.4 m^2 . Its length is 20 m. What is the breadth of the field?

Ans: _____ m

17. Refer to the diagram below. Laura is now facing the shopping centre. She makes a 225° anti-clockwise turn. Where would Laura be facing then?



Ans: _____

18. An egg costs \$0.23 each. A hawker orders 395 eggs. How much does he need to pay for the eggs?

Ans: \$ _____

19. Find the sum of all the factors of 16 .

Ans: _____

20. What is the **largest** possible whole number that can be rounded off to 700 when corrected to the nearest hundred?

Ans: _____

21. Gary has five times as many marbles as Howard. The ratio of the number of Howard's marbles to the number of Isaac's marbles is 5 : 3. Find the ratio of the number of Gary's marbles to the number of Isaac's marbles.

Ans: _____

22. Julia had $2\frac{1}{8}$ kg of sugar. After she had baked a cake, she had $1\frac{1}{2}$ kg of sugar left. How much sugar did Julia use to bake the cake?

Ans: _____ kg

23. At a factory, 12 similar jugs contain 14400 ml of orange juice. How many litres of orange juice are there in 70 such jugs?

Ans: _____ l

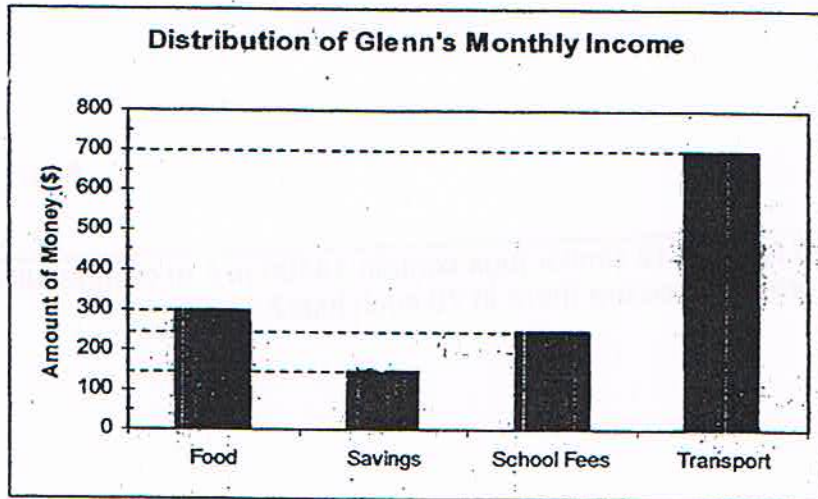
24. A roll of ribbon is 20 m long. A ribbon of length 1 m 2 cm is needed to tie a parcel. How many parcels can be tied using the roll of ribbon?

Ans: _____

25. Write three million, three thousand and three in numerals.

Ans: _____

26. The graph below shows how Glenn allocated his monthly income.



What was his total monthly income?

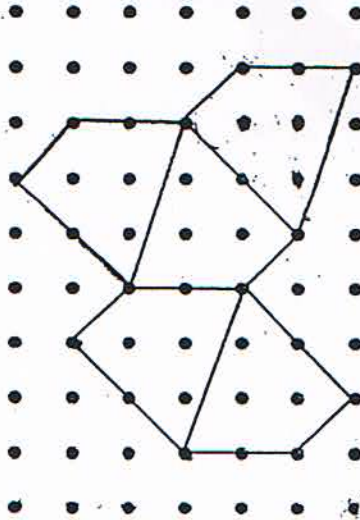
Ans: \$ _____

27. Keith earns \$5000 a month. He saves 40% of it, spends \$600 and gives the rest to his wife. What percentage of his monthly salary does he give to his wife?

Ans: _____ %

28. The pattern shows part of a tessellation. In the grid provided below, -

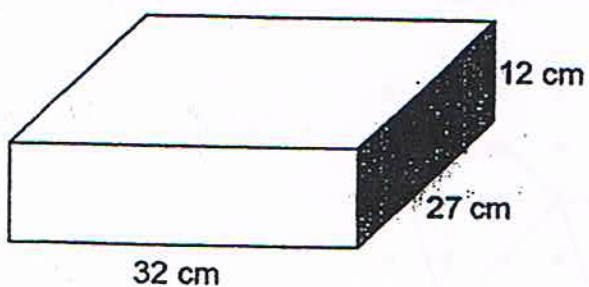
- (a) shade the unit shape. (1m)
- (b) extend the tessellation by drawing two more unit shapes. (1m)



29. Benson has red and blue marbles. $\frac{2}{5}$ of his red marbles is equal to $\frac{3}{4}$ of his blue marbles. Express the number of red marbles as a ratio to the number of blue marbles.

Ans: _____

30. A wooden block measures 32 cm by 27 cm by 12 cm. Find the greatest number of 2-cm cubes that can be cut from it.



Ans: _____

— End of Paper 1 —



NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 2 – 2011
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

Total		/ 60
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Name : _____ ()

Class : _____

Date : 24 August 2011

Parent's Signature : _____

Paper 2 (60 marks)

Questions 1 to 5 carry 2 marks each. Show your workings 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. The ratio of the number of Mike's stickers to the number of Nadia's stickers was 4 : 3. Mike gave Nadia 9 of his stickers and they each had the same number of stickers. How many stickers did Nadia have at first?

Ans: _____

2. Two groups of tourists visited a museum. One group with eight children and four adults paid \$160 for entry. The other group with two children and four adults paid \$100. What is the cost of entry for a child?

Ans: _____

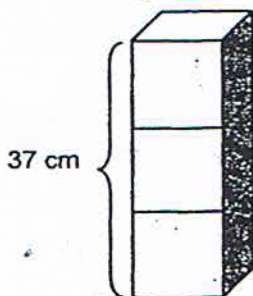
3. Olivia bought a packet of sweets. She gave $\frac{1}{7}$ of them to her cousin and $\frac{1}{2}$ of the remaining sweets to her brother. Then she found that she had 51 sweets left for herself. How many sweets did she have at first?

Ans: _____

4. In January, 25% of a class of 36 pupils are boys. In February, 9 more boys enrol into this class. What percentage of the class are boys in February?

Ans: _____

5. Three identical cubes were stacked to form a height of 37 cm. If 122 such cubes were to be stacked, one on top of the other, what would the total height be? (Give your answer in metres correct to 2 decimal places.)



Ans: _____

For questions 6 to 18, show your workings clearly in the space provided for each question and write the answers in the spaces 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. Mr Samy used $2\frac{1}{3}$ pails of water to water his garden and twice that number of pails of water to bathe his dogs. Mrs Teo used twice the total number of pails of water that Mr Samy used to wash her car. How many pails of water did both of them use altogether?

Ans: _____ [3]

7. At present, Steven is 12 years old and his brother is 5 years old. In how many years' time will their total age be 41 years?

Ans: _____ [3]

8. Mr Taylor cut a plank into 2 portions, Y and Z. He cut a small piece of length 7.5 m from portion Y. His wife cut the remaining portion of Y into another 3 small pieces of 260 cm each. Portion Z was 85% of the total length of Portion Y. What was the length of the plank before it was cut?

Ans: _____ [3]

9. The ratio of the number of soccer balls to the number of basketballs in the PE storeroom was 2 : 3. When another 144 balls were brought into the storeroom, there were twice as many soccer balls and thrice as many basketballs as before. *What was the total number of soccer balls and basketballs in the storeroom originally?*
~~How many soccer balls and basketballs were there in the storeroom originally?~~

Ans: _____ [3]

10. In a bookstore, each pen cost \$1.60. These pens can be bought in packs of 3 for \$4.20. Wayne wants to buy exactly 47 such pens. What is the least amount he has to pay for the pens?

Ans: _____ [3]

11. Valerie wanted to buy a bag which cost \$95. During a sale, there was a discount of 20% given on the bag. How many of such bags could she buy with \$2987 during the sale?

Ans: _____ [3]

12. The total cost of 5 shirts and 3 pairs of jeans was \$390.50. The total cost of a shirt and a pair of jeans was \$117.30. Zack used eighteen \$50-notes to pay for 9 shirts and 7 pairs of jeans. How much change did he receive?

Ans: _____ [4]

13. Study the pattern below.



Figure 1



Figure 2

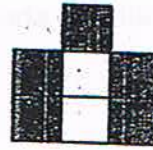


Figure 3

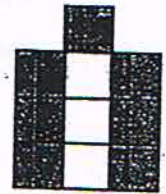


Figure 4

- (a) How many white squares will there be in Figure 10?
- (b) How many grey squares will there be in Figure 10?
- (c) Which figure is made up of a total of 256 squares?

Ans: (a) _____ [1]

Ans: (b) _____ [1]

Ans: (c) _____ [2]

14. A tailor had some buttons. She used $\frac{2}{3}$ of the buttons for some shirts and $\frac{1}{4}$ of the remainder for some dresses. She bought another 1008 buttons and had twice the number of buttons she had at first. How many buttons had she at first?

Ans: _____ [4]

15. A rectangular tank measuring 55 cm long, 40 cm wide and 38 cm high was $\frac{3}{4}$ filled with water. The water was then used to fill up some bottles completely. The capacity of each bottle was 2 litres.

- (a) What is the maximum number of bottles that can be filled completely?
- (b) What was the amount of water left in the tank when all the bottles were filled completely?

Ans: (a) _____ [3]

Ans: (b) _____ [2]

16. Mr Chua has a class of less than 40 pupils. He gave all the pupils in his class some jellybeans. If he gave 5 jellybeans to each pupil, he would have 2 jellybeans left. If he gave 4 jellybeans to each pupil, he would have 38 jellybeans left.

- (a) How many pupils were there in his class?
- (b) How many jellybeans did Mr Chua ~~give away altogether?~~
have

Ans: (a) _____ [3]

Ans: (b) _____ [2]

17. Anne and Mary went shopping with a total of \$965. After Anne spent $\frac{1}{3}$ of her money and Mary spent \$107, the amount of money Mary had left was four times that of what Anne had left. How much more money did Mary bring along for shopping than Anne?

Ans: _____ [5]

18. The ratio of Ahmad's cards to Benny's cards was 3 : 4. After Ahmad bought another 9 cards and Benny lost 18 cards, the ratio became 3 : 2. Find the total number of cards Ahmad and Benny had at first.

Ans: _____ [5]

--- End of Paper 2 ---



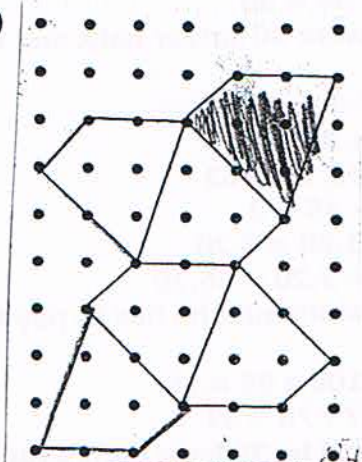
ANSWER SHEET

EXAM PAPER 2011

SCHOOL : NAN HUA
 SUBJECT : PRIMARY 5 MATHEMAEICS

TERM : CA2

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

- 16) 8.47m 17) Park 18) \$90.85 19) 31 20) 749
 21) 25:3 22) 5/8kg 23) 84L 24) 19 parcels 25) 3003003
 26) \$1400 27) 48%
 28) 
 29) 15:8 30) 1248 2-cm cubes

Paper 2

1) $1u \rightarrow 9$

$$6u \rightarrow 9 \times 6 = 54$$

Nadia had 54 stickers at first.

2) 8 children + 4 adult \rightarrow \$160

2 children + 4 adult \rightarrow \$100

6 children \rightarrow \$60

1 child \rightarrow \$10

The cost of entry for a child is \$10.

3) $3u \rightarrow 51$

$$1u \rightarrow 51 \div 3 = 17$$

at first $(7u) \rightarrow 17 \times 7 = 119$

She had 119 sweets at first.

4) $25/100 \times 36 = 9$

$$9 + 9 = 18$$

$$36 + 9 = 45$$

$$18/45 \times 100\% = 40\%$$

The percentage of the class are boys in February is 40%.

5) $37\text{cm} = 0.37\text{m}$

$$(0.37 \div 3) \times 122 \approx 15.05\text{m}$$

The total height is 15.05m

$$6) 2\frac{1}{3} \times 3 = 7$$

$$7 \times 2 = 14$$

$$14 + 7 = 21$$

They both used 21 pails of water.

$$7) 12 + 5 = 17$$

$$41 - 17 = 24$$

$$24 \div 2 = 12$$

In 12 years time their total age will be 41.

$$8) 260\text{cm} \times 3 = 780\text{cm}$$

$$7.5\text{m} = 750\text{cm}$$

$$780\text{cm} + 750\text{cm} = 1530\text{cm}$$

$$85/100 \times 1530\text{cm} = 1300.5\text{cm}$$

$$1530\text{cm} + 1300.5\text{cm} = 2830.5\text{cm}$$

$$9) 144 - (4 - 2) + (9 - 3) = 8$$

$$1u \rightarrow 144 \div 8 = 18$$

$$18 \times 2 = 36$$

$$18 \times 3 = 54$$

$$36 + 54 = 90$$

There were 90 soccer balls and basket balls at first.

$$10) 47 \div 3 \approx 15$$

$$15 \times 3 = 45$$

$$4.20 \times 15 = 63$$

$$47 - 45 = 2$$

$$2 \times 1.60 = 3.20$$

$$63 + 3.20 = 66.20$$

The least amount he has to pay for the pens is \$66.20

$$11) 80/100 \times 95 = 76$$

$$2987 \div 76 \approx 39$$

She could buy 39 bags with \$2987

$$12) \left. \begin{array}{l} 1s + 1j = 117.30 \\ 5s + 3j = 390.50 \end{array} \right\} \times 3$$

$$5s + 3j = 390.50$$

$$390.50 - (117.30 \times 3) = 38.60$$

$$38.60 \rightarrow 2s$$

$$1s \rightarrow 38.60 \div 2 = 19.30$$

$$117.30 - 19.30 = 98$$

$$1j \rightarrow 98$$

$$7j \rightarrow 98 \times 7 = 686$$

$$9s \rightarrow 19.30 \times 9 = 173.70$$

$$686 + 173.70 = 859.70$$

$$18 \times 50 = 900.00$$

$$900.00 - 859.70 = 40.30$$

He received \$40.30 change

13)a) There will be 9 white square in Figure 10

b) $9 \times 2 = 18$

$18 + 1 = 19$

There will be 19 grey square in Figure 10

c) $(n - 1) \times 3 = 1$

$256 - 1 = 255$

$255 \div 3 = 85$

$85 + 1 = 86$

Figure 86 is made up of 256 squares

14) $24 - 3 = 21$

$21u \rightarrow 1008$

$1u \rightarrow 1008 \div 21 = 48$

$12u \rightarrow 48 \times 12 = 576$

She had 576 buttons at first

15)a) $38 \div 4 = 9.5$

$9.5 \times 3 = 28.5$

$55 \times 40 \times 28.5 = 62700$

$62700 \div 2000 \approx 31$

The maximum number of bottles that can be filled completely is 31

b) $31 \times 2000 = 62000$

$62700 - 62000 = 700$

The amount of water left in the tank is 700ml

16)a) $5 - 4 = 1$

$38 - 2 = 36$

$36 \div 1 = 36$

There are 36 pupils in the class

b) $36 \times 4 = 144$

$144 + 38 = 182$

Mr Chua had 182 jellybeans

17) $965 + 107 = 858$

$858 \div 11 = 78$

$78 \times 5 = 390$

$390 + 107 = 497$

Mary brought along \$497 more than Anne

18) 84 cards