

NAN HUA PRIMARY SCHOOL  
CONTINUAL ASSESSMENT 1 – 2008  
PRIMARY 6

MATHEMATICS

BOOKLET A

15 Multiple Choice Questions ( 20 marks)

Total Time for Booklets A and B : 2 hours 15 minutes

INSTRUCTIONS 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.

Marks Obtained

Booklet A	/20
Booklet B	/80
Total	/100

Name: \_\_\_\_\_ ( )

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

Date : 26 February 2008

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). Shade the correct oval on the Optical Answer Sheet.

1. Find the value of  $30 \div 5 + (20 - 6) \times 2$ .

(1) 14

(2) 34

(3) 40

(4) 43

2. What fraction of 3 hours is 20 minutes?

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

(2)  $\frac{3}{20}$

(3)  $\frac{1}{9}$

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

3.  $\frac{3}{5} \times \frac{7}{10}$  is the same as \_\_\_\_\_

(1) 42

(2) 4.2

(3) 0.42

(4) 0.042

4.  $1.5 = \underline{\hspace{2cm}} \div 30$

(1) 0.05

(2) 4.5

(3) 0.5

(4) 45

5. Brenda has the same number of \$5 notes and \$10 notes. Their total value is \$60.  
How many \$10 notes does Brenda have?

(1) 4

(2) 8

(3) 12

(4) 16

6.  $\frac{3}{5} = \underline{\hspace{2cm}} : 20$

(1) 6

(2) 12

(3) 15

(4) 18

7. 4 hairclips cost \$9. How many such hairclips can you buy with \$108?

(1) 8

(2) 12

(3) 48

(4) 96

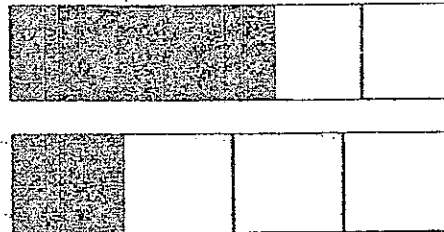
8. The ratio of Penny's pens to Yani's pens is 5 : 8. Yani has 6 pens more than Penny. How many pens do they have in all?

- (1) 13
- (2) 19
- (3) 26
- (4) 32

9. 25% of a triangle is shaded. Find the ratio of the total area of the triangle to the unshaded area of the triangle.

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

10. The 2 rectangles below are identical in size. Each of them is divided into equal parts. What fraction of the 2 rectangles is shaded?



- (1)  $\frac{4}{9}$
- (2)  $\frac{4}{5}$
- (3)  $\frac{17}{40}$
- (4)  $\frac{5}{18}$

11. There are 40 pupils in Primary 6D. 24 of them are boys. How many percent more boys than girls are there?

- (1) 20
- (2) 40
- (3) 50
- (4) 60

12. Jeremy had enough money to buy 14 marbles. However, he bought 9 marbles and 10 erasers instead. If each eraser cost \$0.30, how much did each marble cost?

- (1) \$0.70
- (2) \$0.60
- (3) \$0.40
- (4) \$0.30

13. Odd numbers from 1 to 99 are arranged in 4 columns as shown below. In which column will you find number 87?

A	B	C	D
1	3	5	7
9	11	13	15
17	19	21	23
25			

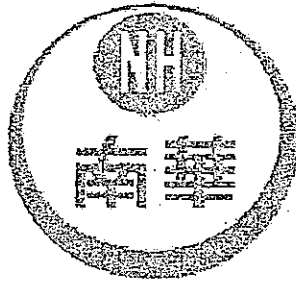
- (1) A
- (2) B
- (3) C
- (4) D

14. The ratio of Melody's savings to Rachel's savings was 6 : 7 at first. After Melody spent 50% of her savings and Rachel spent \$40, Rachel had as much left as Melody. What was their total savings at first?

- (1) 520
- (2) 260
- (3) 130
- (4) 60

15. Sharon used  $\frac{7}{9}$  of her money to buy a dress. She also wanted to buy a bag which cost \$40 more than the dress but she was short of \$50. How much did the bag cost?

- (1) \$14
- (2) \$44
- (3) \$54
- (4) \$94



NAN HUA PRIMARY SCHOOL  
CONTINUAL ASSESSMENT 1 – 2008  
PRIMARY 6

MATHEMATICS

BOOKLET B

20 Short-answer questions (30 marks)

13 Long-answer questions (50 marks)

Total Time for Booklets A and B : 2 hours 15 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided..
2. Follow all instructions carefully.
3. Answer all questions.

Marks Obtained

Section B		130
Section C		150
Total		180

Name: \_\_\_\_\_ ( ) Class: P 6 \_\_\_\_\_

Date : 26 February 2008 Parent's Signature: \_\_\_\_\_

Nan Hua Primary School  
Continual Assessment 1 - 2006  
Mathematics - Primary 6

BOOKLET B

Name : \_\_\_\_\_ ( )

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

**SECTION 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. Express 5% as a decimal.

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

17. A teapot holds 3.75 litres of tea. It is poured into 5 similar cups.  
The capacity of each cup is \_\_\_\_\_

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

18.  $9 \times 0.5 = 2 + \text{_____} \times 0.5$ .

7  
Ans: \_\_\_\_\_



19. When the digit '6' in the number 234.567 is replaced by the digit '8', by how much is the number increased?

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

20. There are some red and blue socks in a basket. The number of red socks in the basket is  $\frac{5}{7}$  the total of the number of socks in the basket. What is the ratio of the number of red socks to the number of blue socks in the basket?

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

21. How many 9-centimetre square cards are required to cover a 9-metre square board?

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

22. Fill in the boxes with the correct signs (-, ×, ÷). Each sign may be used once only.

$$9 \boxed{\phantom{00}} 9 + 9 \boxed{\phantom{00}} 9 \boxed{\phantom{00}} 9 = 9$$

23. 20% of a number is 5. What is 120% of this number?

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

24. For every dollar Doris has, Eugene has \$7.  
For every dollar Eugene has, Flora has \$4.  
How much do Eugene and Flora have if Doris has \$10?

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

25. Ribbon A is  $\frac{2}{3}$  as long as Ribbon B. Ribbon B is  $\frac{1}{4}$  as long as Ribbon C. How many times is Ribbon C as long as Ribbon A?

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

9

Questions 26 to 35 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. (20 marks)

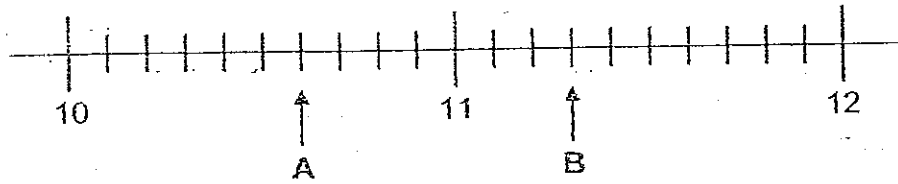
26. The ratio of the number of red apples to the number of green apples in a box is 4 : 7. If 18 more red apples are added into the box, the number of red apples will be equal to the number of green apples. How many apples are there in the box?

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

27. A square was enlarged so that its length was doubled. What was the percentage increase in its area?

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

28. What is the difference in value between A and B?



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

29. 30 children shared a bag of sweets equally. 10 of the children gave all their sweets to the other children in the group. As a result, the other children received 3 more sweets each. How many sweets were in the bag at first?

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

30. For every 6 books which Bill has, Joe has 9. How many books do they have altogether if Joe has 54 books?

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

31. 1 pack of red envelopes costs \$1.45. Lucas needs 30 such packs. For every 3 packs of red envelopes Lucas buys, he gets 1 pack free. How much does Lucas have to pay?

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

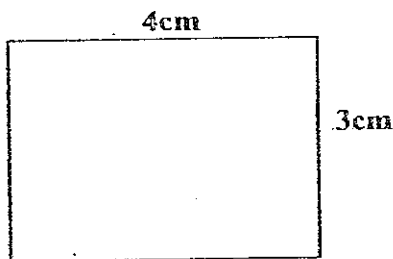
32. Strawberries are sold at \$0.25 per 100g. What is the price of 2.5kg of such strawberries?

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

33. The capacity of a glass is half that of a jug. The glass is  $\frac{1}{3}$  full of juice. Siti pours all the juice into the empty jug. What fraction of the jug is now filled with juice?

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

34. Jeremy wants to make a square with rectangular cards 4cm by 3cm as shown below. Find the least number of cards he needs to make a square.



Ans: \_\_\_\_\_ cards.

35. A clock has its time set to 10a.m.. It goes faster by 3 seconds for every 1 minute of the actual time passed. What is the displayed time when the actual time is 12p.m.?

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

**Section C (50 marks)**

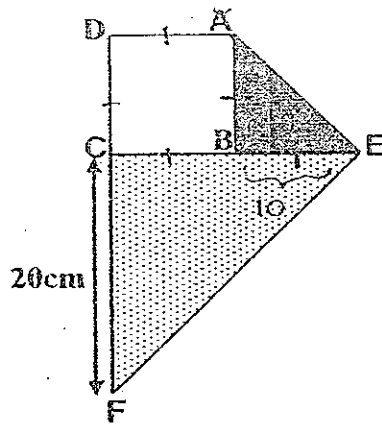
For questions 36 to 48, show your workings clearly in the space provided for each question and write your answers in the spaces provided.

The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

36. Marcus had 50% more stamps than Gina. Marcus gave away half of his stamps and had 750 left. How many stamps did Gina have?

Answer: \_\_\_\_\_ [3]

37. The figure below shows a rectangular piece of paper folded at 2 corners forming the 2 shaded isosceles triangles, ABE and ECF. Point A is the mid-point of the breadth of the rectangular piece of paper and ABCD is a square. Find the area of the rectangular piece of paper.



Answer: \_\_\_\_\_ [3]



38. Mary has \$50. She can buy either exactly 3 similar wallets and 5 similar combs or exactly 10 such wallets. How many such combs can he buy with \$210?

Answer: \_\_\_\_\_ [3]

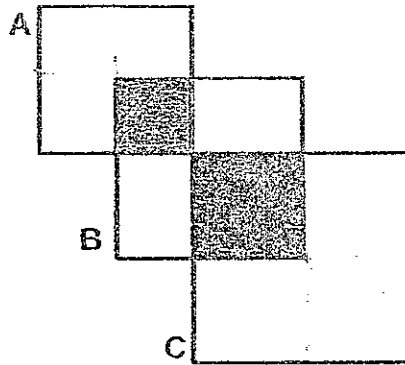
39. Kenny and Joan had some stickers. Kenny had thrice as many stickers as Joan. Kenny used  $\frac{2}{3}$  of his stickers and gave  $\frac{2}{5}$  of the remainder to Joan. Kenny then had 30 stickers left. How many stickers did Joan have at the end?

Answer: \_\_\_\_\_ [3]

40. In one day, Johann can make 450 kites and Darren can make  $\frac{5}{9}$  as many kites.  
How many days are required to make 3500 kites by both of them?

Answer: \_\_\_\_\_ [3]

41. The figure below consists of 3 overlapping squares A, B and C. The ratio of the area of A to the area of B to the area of C is 2 : 3 : 4. If 25% of both Squares A and C is shaded, find the ratio of the shaded area to the unshaded area in the figure. Please give your answer in the simplest ratio.



Answer: \_\_\_\_\_ [3]

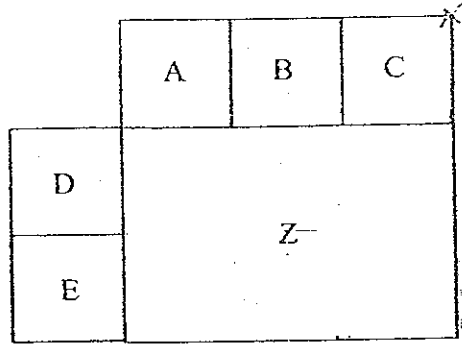
42. In a farm, there are three times as many ducks as goats. There is an equal number of cows and goats. The total number of legs of all these animals is 1400.

- a) How many ducks are there in the farm?
- b) How many cows are there in the farm?

Answer: a) \_\_\_\_\_ [3]

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

43. The figure below is made up of 5 identical squares A, B, C, D and E and a rectangle Z. Find the perimeter of the whole figure if the area of Rectangle Z is  $486\text{cm}^2$ .



Answer: \_\_\_\_\_ [4]

44. Ali, Baba and Carapa inherited a sum of money from their father. The amount of money Ali received to the amount Carapa received was in the ratio 3 : 5.

Carapa's amount was  $\frac{3}{4}$  that of Baba's. Ali's amount was \$770 less than Baba's.

a) What is the ratio of Ali's money to Baba's money to Carapa's money?

b) How much money did they get altogether?

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

b) \_\_\_\_\_ [3]

45. Peter read 810 pages of a storybook on Friday. On Saturday, he read  $\frac{1}{6}$  of the remaining pages. If he still had 50% of the book to complete, find the number of pages in the book.

Answer: \_\_\_\_\_ [5]

23



46. There were some \$5, \$10 and \$50 notes in Jane's wallet. The value of the \$5, \$10 and \$50 was in the ratio 3 : 4 : 2. After spending 50% of her \$50 notes, 10 of her \$10 notes and  $\frac{2}{3}$  of her \$5 notes, Jane had \$200 left. Find the total amount of money Jane had in her wallet at first.

Answer: \_\_\_\_\_ [5]

47. 20% of the people at the auditorium are adults. 25% of the children are boys. There are 80 fewer boys than girls. Assuming that the number of adults remain the same, how many girls must leave so that the number of adults is 50% that of the number of girls in the auditorium?

Answer: \_\_\_\_\_ [5]

48. Study the pattern below carefully.

	Column A	Column B	Column C	Column D	Total
Row 1	▽	■	▽	▽	42
Row 2	■	■	▽	■	54
Row 3	☆	▽	■	▽	44
Row 4	▽	☆	■	♣	41
Total	44	50	48	39	

Find the value of ▽, ■, ☆ and ♣.

Answer: \_\_\_\_\_ ▽  
 \_\_\_\_\_ ■  
 \_\_\_\_\_ ☆  
 \_\_\_\_\_ ♣

[5]

*End of Paper*

# ANSWER SHEET

EXAM PAPER 2008

SCHOOL : NAN HUA PRIMARY SCHOOL

SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA 1

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

16) 0.05

17) 0.75 litres

18) 5

19) 0.02

20) 5:2

21) 2000 cards

22)

23) 30

24) \$350

25) 6 times

26) 4 poles

27) 300%

28)  $\frac{7}{10}$

29) 18

30) 90

31) 4

32) \$6.25

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

34) 2.06 p.m.

100%

100%

50%

Math  $100\% - 50\% = 50\%$

$50\% = 75$

75%  $\rightarrow 75$

1%  $\rightarrow 75 \div 75 = 1$

Gina  $\rightarrow 100 \times 1 = 1000$

Gina has 1000 stamps

37) 1 side  $BE = 200 \div 2 = 100$  cm

$CE = BE = 100$  cm

Area of  $\triangle ABE = \frac{1}{2} \times 100 \text{ cm} \times 100 \text{ cm} = 5000 \text{ cm}^2$

$2 \triangle ABE = 5000 \times 2 = 10000 \text{ cm}^2$

Length of DA  $\rightarrow 200 \div 2 = 100$  cm

DA = DC = 100 cm

Area of ABCD  $\rightarrow 100 \times 100 = 10000 \text{ cm}^2$

Area of  $\triangle CEF = \frac{1}{2} \times 100 \text{ cm} \times 200 \text{ cm} = 10000 \text{ cm}^2$

$2 \triangle CEF = 10000 \times 2 = 20000 \text{ cm}^2$

Area of rectangular part  $\rightarrow 40000 \text{ cm}^2 = 20000 \text{ cm}^2 + 20000 \text{ cm}^2$

$= 60000 \text{ cm}^2$

The area is 60000 cm<sup>2</sup>

38) Wallet  $\rightarrow$  W  
Combs  $\rightarrow$  C

$$3W + 5C = \$50$$

$$10W = \$50$$

$$1W = \$50 \div 10 = \$5$$

$$3W \rightarrow 3 \times \$5 = \$15$$

$$C \rightarrow \$50 - \$15 = \$35$$

$$C \rightarrow \$35 \div 5 = \$7$$

$$C \rightarrow \$210 \div \$7 = 30$$

He can buy 30 combs.

39) units  $\rightarrow$  30

$$1 \text{ unit} = 30 \div 3 = 10$$

$$\text{Joan in the end} \rightarrow 7 \times 10 = 70$$

Joan had 70 stickers in the end.

40) 1 day

$$\text{Johann} \rightarrow 450$$

$$\text{Darren} \rightarrow 450 \times 5/9 = 250$$

$$\text{Total} \rightarrow 450 + 250 = 700$$

$$\text{no. of days} \rightarrow 700 \div 140 = 5$$

5 days are required.

41) shaded : unshaded

$$3 : 12$$

$$1 : 4$$

The ratio is 1:4

42) Duck  $\rightarrow 3 \times 2 = 6$

$$\text{Goat} \rightarrow 1 \times 4 = 4$$

$$\text{Cow} \rightarrow 1 \times 4 = 4$$

$$1 \text{ set} \rightarrow 6 + 4 + 4 = 14$$

$$\text{no. of set} \rightarrow 1400 \div 14 = 100$$

$$\text{a) } 6 \times 100 = 600$$

$$600 \div 2 = 300$$

There are 300 ducks in the farm.

$$\text{b) } 100 \times 4 = 400 \text{ (legs)}$$

$$400 \div 4 = 100$$

There are 100 cows on the farm.

43)  $Z = 6$  identical square

Area of 1 square  $\rightarrow 486 \text{ cm}^2 \div 6 = 81 \text{ cm}^2$

1 side of the square  $\rightarrow 9 \text{ cm} \times 9 \text{ cm} = 81 \text{ cm}^2$

$14 \times 9 \text{ cm} = 126 \text{ cm}$

The perimeter is 126 cm.

$16 - 9 = 7$

$16 - 9 = 7$

11 units  $\rightarrow \$770$

1 unit  $\rightarrow \$770 \div 11 = 70$

$70 \div 7 = 10$

$10 \times 15 = 150$

But

A : C

9 : 15

the ratio is 9 : 20 : 15

b)  $15 \times 15 = 225$

$4 \times 70 = 280$

The net is 308 altogether.

45) 4 units  $\rightarrow 810$

1 unit  $\rightarrow 810 \div 4 = 202.5$

5 units  $\rightarrow 202.5 \times 5 = 1012.5$

Total  $\rightarrow 1012.5 \times 2 = 2025$

The number of pages is 2025.

46) \$5:

$\$5 \times 3 = \$15$

\$10:

$4 \times \$10 = \$40$

\$50:

$2 \times \$50 = \$100$

$\$10 \times 10 = \$100$

6 units  $\rightarrow \$200 + \$100 = \$300$

1 unit  $\rightarrow \$300 \div 6 = \$50$

$\$5 \rightarrow \$50 \times 3 = \$150$

$\$10 \rightarrow \$50 \times 4 = \$200$

$\$50 \rightarrow \$50 \times 2 = \$100$

$\$150 + \$200 + \$100 = \$450$

She had \$450 in her wallet at first.

47) 4 units  $\rightarrow$  80  
 1 unit  $\rightarrow$  80  $\div$  4 = 20  
 Adults  $\rightarrow$  20  $\times$  2 = 40  
 Girls  $\rightarrow$  40  $\times$  2 = 80  
 5  $\times$  20 = 120  
 120 - 80 = 40  
 40 girls must leave.

48)  $2\nabla + 2\square \rightarrow 48$   
 $\nabla + \square \rightarrow 48 \div 2 = 24$   
 $\square \rightarrow 50 - 24 = 26$   
 $2\nabla \rightarrow 24 - 26 = -2$   
 $\nabla \rightarrow -2 \div 2 = -1$   
 $3\nabla \rightarrow 3 \times -1 = -3$   
 $\square \rightarrow 47 - 27 = 20$   
 $\rightarrow 57 - (2 \times 15) = 27$   
 $27 - 3 = 24 = 11$   
 $\square \rightarrow 27 - 16 = 11$   
 $\nabla \rightarrow 11 - 5 = 6$

$\nabla$  is 6,  $\square$  is 11,  $\star$  is 11 and  $\diamond$  is 6