NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2012
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 <u>not allowed</u> to use calculator for Paper 1.

Marks Obtained

Paper 1		/ 40
Paper 2		/ 60
Total		/ 100

Name : _____ (   )

Class : _____

Date : 10 May 2012   Parent's Signature: _____

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.　　5 hundreds, 6 tenths and 7 thousandths is _____.

    (1)　　560.007

    (2)　　500.760

    (3)　　500.607

    (4)　　500.067

2.　　The number of people in a stadium is 50 000 when rounded off to the nearest ten thousand. What is the **greatest** possible number of people in the stadium?

    (1)　　45 499

    (2)　　45 500

    (3)　　54 999

    (4)　　55 000

3.　　Which of the following is the closest estimate of 198.8×39.6?

    (1)　　3000

    (2)　　4000

    (3)　　6000

    (4)　　8000

4.   Which of the following is the **smallest** number that can be divided by 2 with no remainder?

(1)   5305

(2)   3550

(3)   2033

(4)   2358

5.   Which of the following fractions is smaller than $\frac{1}{5}$?

(1) $\frac{10}{45}$

(2) $\frac{8}{35}$

(3) $\frac{7}{30}$

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

6.   Which of the following is **not** a factor of 48 and 54?

(1)   6

(2)   2

(3)   3

(4)   9

7. A machine can produce 1300 cards in 6 minutes. At this rate, how many cards can it produce in $\frac{1}{2}$ hour?

(1) 650

(2) 3900

(3) 6500

(4) 39 000

8. How many fifths must be added to $\frac{11}{20}$ to make $\frac{3}{4}$?

(1)   1

(2)   2

(3)   3

(4)   4

9. $450 + (300 - 50) \div 5 \times 2 = $ _____.

(1)   70

(2)   280

(3)   550

(4)   1000

10. The capacity of a jug is twice the capacity of a glass.

The jug is $\frac{1}{4}$ full of water. All the water from the jug is then poured into the glass without spilling. What fraction of the glass is filled with water now?

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

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

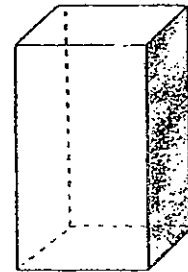(3) $\frac{1}{3}$

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

11. The figure shows a cuboid with a square base of area 9 cm². The area of the shaded face is 36 cm². What is the volume of the cuboid?

(1)   108 cm³

(2)   144 cm³

(3)   324 cm³

(4)   432 cm³

12. The area of a rectangle is 180 cm². The ratio of its length to its breadth is 5 : 1. What is its breadth?

(1)   6 cm

(2)   9 cm

(3)   30 cm

(4)   36 cm

13. How many right angles has the minute hand of a clock moved from 2 p.m. to 4.30 p.m.?

    (1)   12

    (2)   10

    (3)   3

    (4)   6

14. One block of metal, 2 cm by 6 cm by 9 cm, is melted and made into 4 similar cubes. What is the length of each cube?

    1)   6 cm

    (2)   9 cm

    (3)   3 cm

    (4)   12 cm

15. A watch cost $120 more than a bag. Janet used $\frac{1}{3}$ of her money to buy the bag and was then short of $50 to buy the watch. How much did Janet have at first?

    1) $150

    2) $210

    3) $260

    4) $360

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.
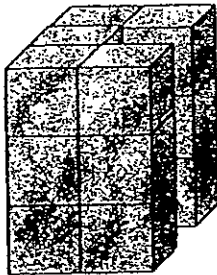
16. Nine million and two written in numeral is _____ .

Ans: _____

17. Express $3\dfrac{4}{7}$ as an improper fraction.

Ans: _____

18. The figure below is formed by some cubes. Find the volume of the figure if the
volume of each cube is 1000 cm³.

Ans: _____ cm³

19. $$\frac{1}{5} + \frac{1}{5} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} = \boxed{} \times \frac{1}{10} + \frac{1}{2}.$$

What is the missing number in the box?

Ans: _____

6

/4

20. There are 4 consecutive odd-numbered cards arranged in a row in increasing order. The sum of the second and third numbered cards is 108. What is the value on the first numbered card?

Ans: _____

21. At a buffet promotion, for every 3 paying adults, the 4th adult gets to dine for free. If Mr Lee dines with 29 friends at the restaurant, how many of them dine(s) for free?

Ans: _____

22. At a concert, the ratio of the number of women to the number of men is 3 : 1. The ratio of the number of women to the number of children is 1 : 4. What is the ratio of the number of adults to the number of children at the concert? (Write your answer in the simplest form.)

Ans: _____

/3

23. If 360mℓ of water is collected from a leaking container in 2 minutes. At this constant rate, how much water is collected from the container per second?

Ans _____ mℓ

24. $\frac{1}{4}$ of Anna's money is twice of Wendy's money. Find the ratio of Wendy's money to Anna's money.

Ans: _____

25. The 3rd multiple of 8 is the same as the 4th multiple of a number. What is the number?

Ans: _____

/3

8

26. The number of Sally's and Cindy's five-cent coins is in the ratio 3 : 8 respectively. Given that Sally's share of five-cent coins is $2 less than Cindy's share, how many five-cent coins does Sally have?
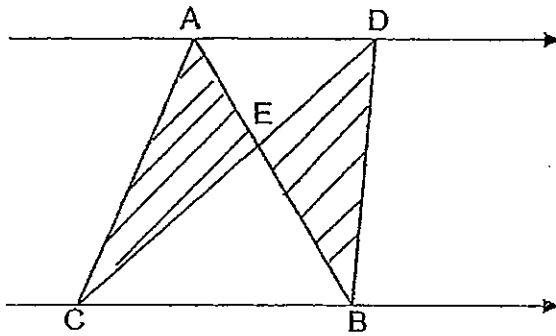
Ans:_____five-cent coins

27. The diagram below shows a 2cm wide pathway. A dotted line is drawn exactly in the middle of the pathway. Find the length of the dotted line.
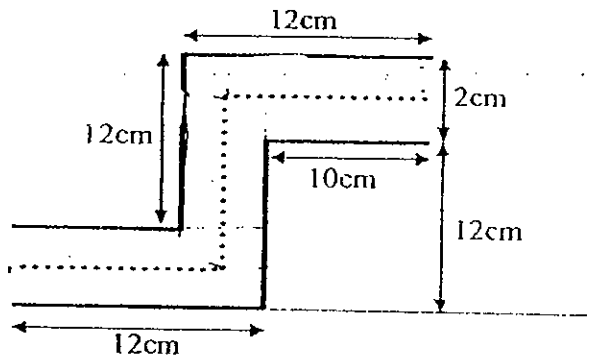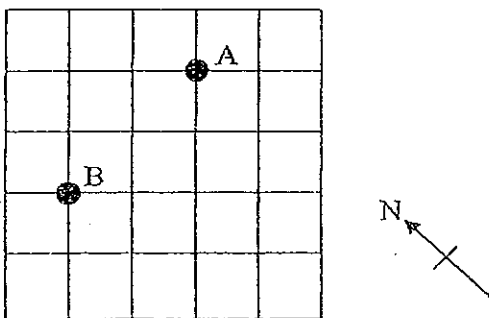

Ans: _____cm

/4

28. The figure below is made up of 2 triangles CAB and CDB, which are between 2 parallel lines. The area of triangle CAB is 480cm^2 and that of triangle CEB is 189cm^2. Find the total shaded areas.

Ans: _____ cm^2

29. Study the square grid and compass below carefully.

Sammy is standing at Point A. In which direction is Point B from her?

Ans: _____

/4

77

30. Study the pattern below and find the value of **11111 × 11111**.

1.	1 × 1	1
2.	11 × 11	121
3.	111 × 111	12321
4.	1111 × 1111	1234321
5.	11111 × 11111	?

Ans: _____

/2

End-of-Paper 1

NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2012
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

Name : _____(   )

Class : _____

Date : 10 May 2012

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. There was $\frac{4}{5}$ ℓ of orange juice in a jug. Mrs. Tan poured all of it into 3 glasses equally without spilling. How much orange juice was there in each glass?

    Ans: _____ ℓ

2. $\frac{4}{9}$ of a certain number is 48. What is half of the number?

    Ans: _____

3. $\frac{1}{3}$ of Gaga's money is the same as $\frac{2}{5}$ of Lala's money. Find the ratio of Lala's money to Gaga's money. (Give your answer in the simplest form)
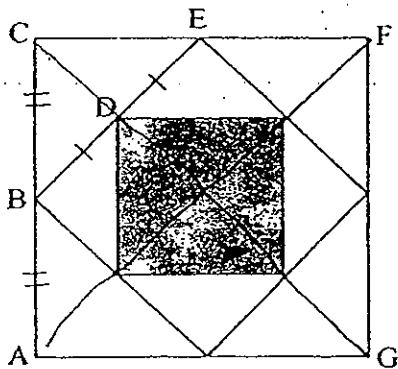
    Ans: _____

    /6

4. The difference between two numbers is 400. The bigger number is thrice the smaller number. What is the sum of the two numbers?

Ans : _____

5. The figure below is made up of 3 squares with different areas where AB = BC and BD = DE. The area of the shaded square is 16 cm². Find the area of square ACFG.

Ans : _____ cm²

/4

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. Keith had a number of books for sale. He sold 560 books on Saturday. On Sunday, he sold $\frac{1}{5}$ of the remaining books and was left with 40 books. How many books did he have at first?

Ans: _____ [3]

7. For every 50 cents that Helen saves, her mother contributes another 30 cents into her savings. When Helen has $44.80 in her savings, how much of it has been contributed by her mother?

Ans: _____ [3]

/6

3

8. Kate has $4\frac{1}{2}$ times as many ➡stickers as Terry. After giving Terry $\frac{1}{3}$ of her stickers, Kate had 50 stickers more than Terry. How many stickers did Kate give to Terry?

Ans: _____ [3]

9. Jeter saved $84 in 4 weeks. If each week he saved $6 more than he did the previous week, how much did he save in the last week?

Ans: _____ [3]

/6

4

83

10. Eddie had thrice as many stickers as Angel. Eddie used $\frac{2}{3}$ of his stickers and gave $\frac{1}{4}$ of the remainder to Angel. Eddie then had 474 stickers left. How many stickers did Angel have at the end?

Ans: _____ [3]

11. There are a total of 500 red and blue beads in a box. The ratio of the number of red beads to the number of blue beads is 2 : 3. How many red beads must be added to the box so that the ratio of the number of red beads to the number of blue beads is 2 : 1?

Ans: _____ [3]

/6

12. In Figure 1, Tank A is completely filled with water and Tank B is empty. Water is poured from Tank A into Tank B without spilling. The heights of the water level in the two tanks are now equal as shown in Figure 2. The diagrams are <u>not drawn to scale</u>.

Tank A   Tank B
50cm
20cm
←10cm→

Figure 1

Tank A   Tank B
12.5cm
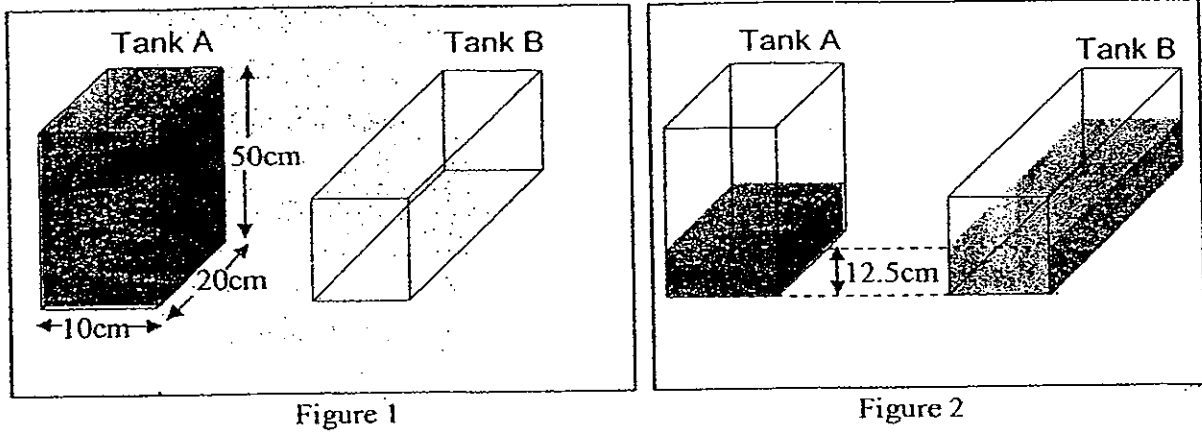
Figure 2

(a) What is the volume of water in Tank B in Figure 2?

(b) Tank B (in Figure 2) is $\frac{5}{6}$ filled with water. What is its full capacity?

Ans: (a) _____ [2]

(b) _____ [2]

/4

6

85

13. A number sequence is shown below.

1, 3, 1, 3, 2| 1, 3, 1, 3, 2, |1, 3, 1, 3, 2, |...
1st, 2nd, ...

What is the sum of the first 102 numbers in this sequence?

Ans: _____[4]

/4

14. Kennie bought a bag of coloured marbles. Each of the colours is expressed as a fraction of the total number of marbles in the bag below.

Red	Green	Yellow	Blue
$\dfrac{1}{10}$	$\dfrac{3}{10}$	$\dfrac{1}{4}$	?

(a) What fraction of the marbles are blue? Leave your answer in the simplest form.

(b) If there are 400 red and green marbles, how many marbles are there in the bag altogether?

Ans: (a) _____ [2]

(b) _____ [2]

/4

8

15. Amanda had a sum of money. She spent $\frac{1}{3}$ of it on a dress. She then spent

$\frac{1}{2}$ of the remaining money plus $2 on a handbag. Finally she had with $10 left.

(a) How much did the handbag cost?

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

Ans: (a) _____ [3]

Ans: (b) _____ [2]

/5

16. Mrs Tan had the same number of apples, oranges and pears at first. She gave away 70 apples and used some oranges and pears to make a mixed fruit juice. Then she had 180 fruits left. Among the fruits left, there were twice as many oranges as pears. The number of apples was 20 fewer than the number of oranges in the end.

(a) How many apples were left?

(b) How many pears were used?

Ans: (a) _____ [3]

Ans: (b) _____ [2]

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        ┌──────────┐
        │          │
        │       /5 │
        └──────────┘
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17. There were some sweets in Boxes A, B and C.

Box A contained $\frac{1}{7}$ of the total number of sweets in Boxes B and C.

The ratio of the number of sweets in Box B to the total number of sweets in Boxes A and C is 3 : 1.

If there are 30 more sweets in Box B than Box A, find the total number of sweets in Boxes A, B and C.

Ans: _____ [5]

/5

11

18. Jane went shopping at a departmental store. If she buys 6 plates and 10 cups, she will have $12 left. If she buys 10 plates and 6 cups, she will need another $8.

(a) Given that a cup costs $3, how much does a plate cost?

(b) How much does Jane have?

Ans: (a) _____ [3]

(b) _____ [2]

/5

ExamSutra 考试圣经
Answer Sheets

EXAM PAPER 2012

SCHOOL : NAN HUA
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1

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

16)9000002   17)25/7   18)1000 x 15 = 15000cm₃   19)2

20)51   21)7   22)1:3   23)360 ÷ 3 = 3ml

24)1:8   25)8 x 3 = 24   26)24   27)12 − 1 = 11
                  24 ÷ 4 = 6   12 + 1 − 1 = 12
                                                    12 − 1 = 11
                                                    11 + 12 + 11 = 34cm

28)480 − 189 = 291   29)west   30)123454321
     291 x 2 = 582cm₂

Paper 2
1)4/5 ÷ 3/1 = 4/5 x 1/3 = 4/15

2)48 ÷ 4 = 12
  12 x 9 = 108
  108 ÷ 2 = 54

3)5:6

4)3 − 1 = 2
  2u → 400
  1u → 200
  4u → 800

5) $4 + 4 = 8$

$8 \times 8 = 16cm_2$

6) 4/5 0f remainder→40

1/5 of remainder→10

5/5 0f remainder→50

$50 + 560 = 610$

7) $50c + 30c = 80c$

$\$4480 \div 0.80 = 56$

$56 \times \$0.30 = \$16.80$

8) Kate : Terry

9 : 2

6 : 5

3 units→$50 \times 3 = 150$

9) $\$18 + \$12 + \$6 = \$36$

$\$84 - \$36 = \$48$

$\$48 \div 4 = \$12$

$\$12 + \$18 = \$30$

10) $474 \div 3 = 158$

$158 \times 5 = 790$

11) R   B   Total

(2 : 3   5) × 100

200 300 500

(2 :   1) × 300

600 : 300

$600 - 200 = 400$

12) a) $10 \times 20 \times 12.5 = 2500cm_3$

b) $10 \times 20 \times 50 = 10000$

$10000 - 2500 = 7500$

$7500 \div 5 = 1500$

$1500 \times 6 = 9000cm_3$

13) $1 + 3 + 1 + 3 + 2 = 10$
   $102 \div 5 = 20R2$
   $20 \times 10 = 200$
   $1 + 3 = 4$
   $200 + 4 = 204$

14) a) $12/40 + 4/40 + 10/40 = 20/40$
       $40/40 - 26/40 = 14/40$
       $14/40 = 7/20$
    7/20 of the marbles are blue.

    b) $400 \div 16 = 25$
       $40 \times 25 = 1000$
There are 1000 marbles in the bag altogether.

15) a) $\$10 + \$2 = \$12$
       $\$12 + \$2 = \$14$
    b) $\$12 \times \$3 = \$36$

16) a) $180 + 20 = 200$
       $200 \div 5 = 40$
       $40 \times 2 = 80$
       $80 - 20 = 60$
    b) $60 + 70 = 130$
       $130 - 40 = 90$

17) $5u \rightarrow 30$
    $1u \rightarrow 30 \div 5 = 6$
    $8u \rightarrow 8 \times 6 = 48$

18) a) $\$8 + \$24 = \$32$
       $\$32 \div 4 = \$8$
    b) $8 \times 6 = 48$
       $14 \times 3 = 42$
       $42 + 48 = \$90$

96
End