## NAN HUA PRIMARY SCHOOL

## PRIMARY FOUR SEMESTRAL ASSESSMENT 2 - 2012

## MATHEMATICS

**Duration :** 1 h 45 min

## INSTRUCTIONS TO CANDIDATES

1. Write your name, register number and class in the blanks provided.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

## Marks Obtained

| | |
|---|---|
| Section A & B | / 80 |
| Section C | / 20 |
| Total | / 100 |

Name : _____ ( )

Class :  P 4 _____

Date  :  24 Oct 2012          Parent's Signature : _____

Questions 1 to 20 carry 2 marks each.

Of the 4 options given, only one is correct. Choose the correct answer (1, 2, 3 or 4) and shade the correct oval on the Optical Answer Sheet (OAS).

1. 85 thousands and 6 tens is the same as _____.

    (1)    856
    (2)    8560
    (3)    85 006
    (4)    85 060           (     )

2. Which one of the following pairs are common factors of both 18 and 27?

    (1)    1 and 6
    (2)    2 and 3
    (3)    3 and 9
    (4)    6 and 9           (     )

3. In 68.75, the digit _____ is in the tenths place.

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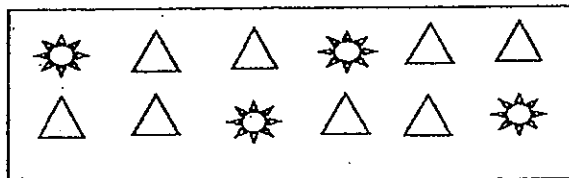    (4)    8           (     )

4. What fraction of the shapes in the box are ☀ ?

    (1)    $\dfrac{1}{2}$

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

    (3)    $\dfrac{1}{8}$

    (4)    $\dfrac{1}{12}$           (     )

5. What is the missing number in the box?

$$8\frac{5}{9} = \frac{\boxed{\phantom{00}}}{9}$$

(1) 40

(2) 67

(3) 77

(4) 85

( )

6. Which one of the following fractions is in its simplest form?

(1) $\frac{5}{7}$

(2) $\frac{3}{6}$

(3) $\frac{6}{9}$

(4) $\frac{2}{10}$

( )

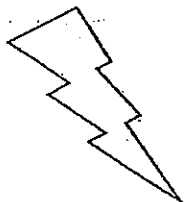7. Which one of the following figures has 2 lines of symmetry?

(1) **M**
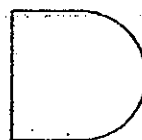
(2) **Z**

(3) **E**

(4) **X**
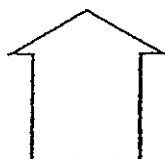
( )

2

53

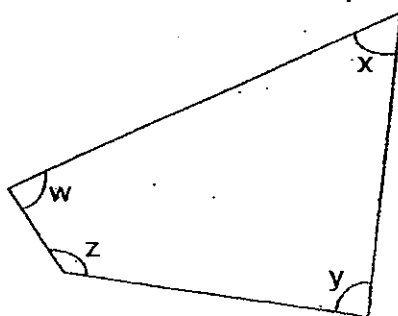8. Which of the following unit shapes can be tessellated?

(1)

(2)

(3)

(4)

(    )

9. In the figure below, which angle is **greater than** a right angle?

(1)   ∠ w
(2)   ∠ x
(3)   ∠ y
(4)   ∠ z

(    )

10. The area of a square is 100 cm². Find its perimeter.

(1)   10 cm
(2)   20 cm
(3)   25 cm
(4)   40 cm
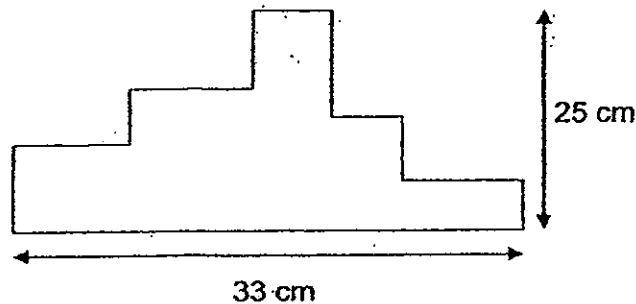
(    )

3

11. When a certain number is rounded off to the nearest 100, the answer is 38900. The smallest possible whole number is _____.

    (1)  38 845
    (2)  38 850
    (3)  38 901
    (4)  38 945                                    (     )

12. The figure below is not drawn to scale. Given that all the lines meet at right angles, find its perimeter.



    (1)  58 cm

    (2)  83 cm

    (3)  91 cm

    (4)  116 cm                                    (     )

13. A bag contains 60 buttons. $\frac{1}{4}$ of the buttons are blue. $\frac{1}{2}$ of the buttons are yellow and the rest are green. How many green buttons are there?

    (1)  15
    (2)  20
    (3)  40
    (4)  45                                        (     )

4

55

14. When it is 06 00 in Singapore, it is 07 00 in Korea on the same day. Mr Wong, who was in Korea on a business trip, called his daughter in Singapore. She received his call at 23 10 on Monday. What was the time and day in Korea?

    (1)    00 10, Monday
    (2)    00 10, Tuesday
    (3)    22 10, Monday
    (4)    22 10, Tuesday        (      )


15. Cindy bought a laptop and a television set for a total of $4 800. The difference between the cost of the two items was $1 800. If the laptop costs more, how much did the television set cost?

    (1)    $1200
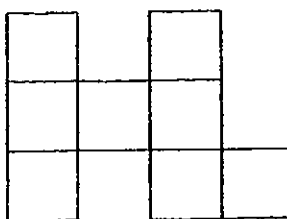    (2)    $1500
    (3)    $3000
    (4)    $3300        (      )


16. The total mass of 3 similar pineapples and a watermelon is 13.9 kg. The mass of the watermelon is 1.5 kg more than that of a pineapple. What is the mass of each pineapple?

    (1)    3.1 kg
    (2)    4.1 kg
    (3)    4.6 kg
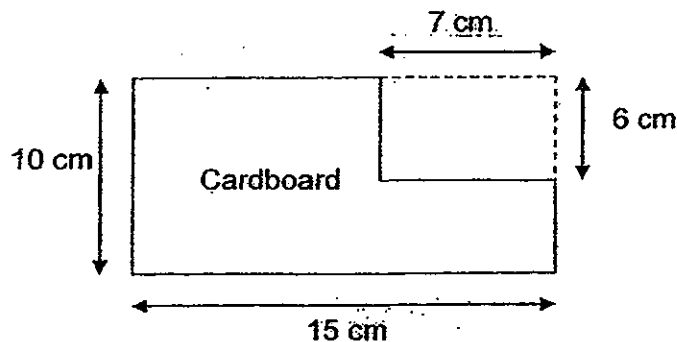    (4)    6.6 kg        (      )


17. The figure below is made up of 3-cm squares. Find its perimeter.

    (1)    18 cm
    (2)    24 cm
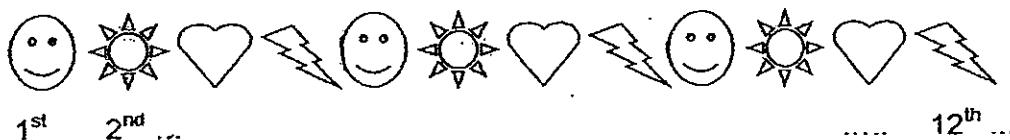    (3)    54 cm
    (4)    72 cm        (      )

18. Marcus has a piece of cardboard of length 15 cm and breadth 10 cm. He cuts away a small rectangle at one of its corners as shown. What is the area of the remaining cardboard?



(1) 32 cm$^2$
(2) 42 cm$^2$
(3) 108 cm$^2$
(4) 150 cm$^2$                    (     )

19. Jerome used stickers to make a pattern. The first 12 stickers are shown below. What is the shape of the 37$^{th}$ sticker?



1$^{st}$    2$^{nd}$ ...                                    ..... 12$^{th}$ ...

(1)  

(2)  

(3)  

(4)                          (     )

6

57

20. Laura spent some of her money on a magazine. She spent $\frac{3}{7}$ of her money on a set of colour markers and had $12 left. If the magazine costs $24, how much money did Laura have at first?

(1) $27
(2) $36
(3) $42
(4) $63

(       )

Questions 21 to 40 carry 2 marks each.
Write out the correct answers for the following questions in the boxes provided.
Show your workings clearly and give your answers in the units provided.

21. Find the value of 7.37 × 6.

22. Arrange the numbers below in order, beginning with the **greatest**.

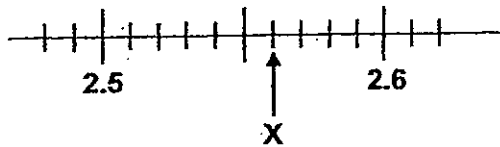$$4156 \ , \ 5141 \ , \ 4165 \ , \ 5114$$

_____ , _____ , _____ , _____
greatest                                                        smallest

23. _____ ÷ 4 = 3171 R3

24. Express $\dfrac{62}{8}$ as a mixed number in its simplest form.

8

59

25. How many sixths are there in $\frac{2}{3}$ ?

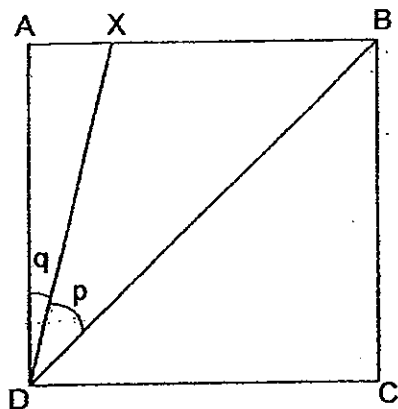26. Write the decimal represented by X.



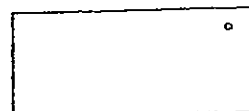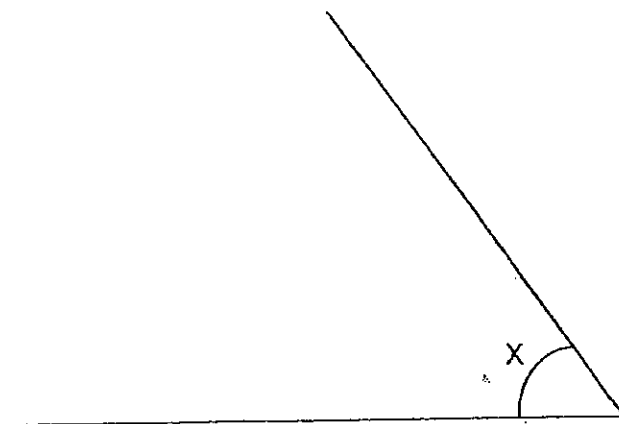27. Round off 19.39 to the nearest whole number.

28. Mrs Tan bought 2 kg of grapes. Her family ate $\frac{1}{5}$ of it and packed the remaining grapes into 5 similar packets. What is the mass of the grapes in each packet? Express your answer in grams.

g

29. In the figure, not drawn to scale, ABCD is a square. ∠p is twice as large as ∠q . What is ∠p ?



30. Measure and write down the size of ∠ x.

31. There were 3 litres of syrup in a jug. Glendon poured out 5 cups of 250 mℓ each for his brothers. How much syrup had he left?

|  ℓ  | mℓ |
|-----|-----|

32. A tour bus left Singapore for Penang at 10.15 p.m. Along the way, it stopped for petrol for 15 minutes. The tour bus finally reached Penang at 2.45 a.m. the next day. How long did the journey take? (Exclude the time taken for refueling for petrol).

|  h  | min |
|-----|-----|

33. 1 boy had as many coins as 2 girls. 2 boys and 4 girls had 192 coins altogether. How many coins did each boy have?

|     | coins |
|-----|-------|

34. Cupcakes are sold in boxes of 6. Each box costs $4. With $39, what is the maximum number of cupcakes Dan can buy?

|     | cupcakes |
|-----|----------|

11

The table below shows the total number of plates of fried noodles and fried rice sold in the school canteen from Monday to Friday.
Study the table below carefully and use it to answer questions 35 and 36.

| Day | Number of plates | | Total Amount collected |
| --- | --- | --- | --- |
| | Fried noodles | Fried rice | |
| Monday | 120 | 60 | $180 |
| Tuesday | 85 | 110 | $195 |
| Wednesday | 50 | 156 | $206 |
| Thursday | 135 | 82 | $217 |
| Friday | ? | ? | $186 |

35. What was the total amount of money collected from Monday to Friday?

$

36. A plate of fried noodles and a plate of fried rice cost $1 each. On Friday, the number of plates of fried noodles sold was twice that of fried rice. How many plates of fried noodles were sold on Friday?

37. In the figure below, the dotted line is a line of symmetry. Shade the squares and triangles required to make a symmetric pattern.
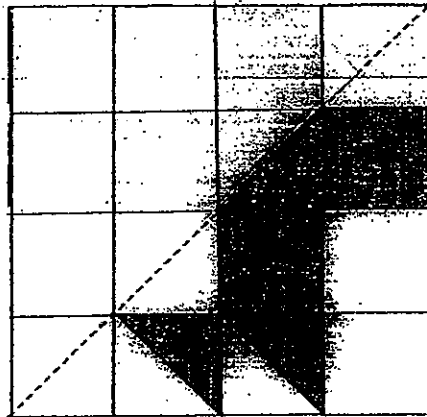
38. What fraction of the figure is shaded?
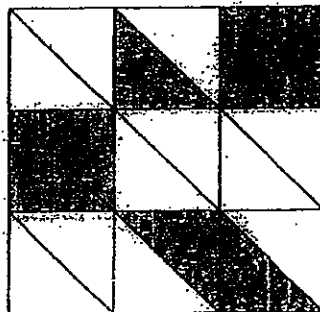
39. The area of a rectangular garden ABCD is 196 m². Then, Mr Yeo dug a square-shaped pond in the garden as shown. $\frac{1}{4}$ of the area of the rectangular garden ABCD is used for the pond. What is the length of the square-shaped pond?

A _____ B
|   POND         ↕?        |
D _____ C

_____ m
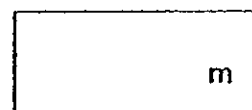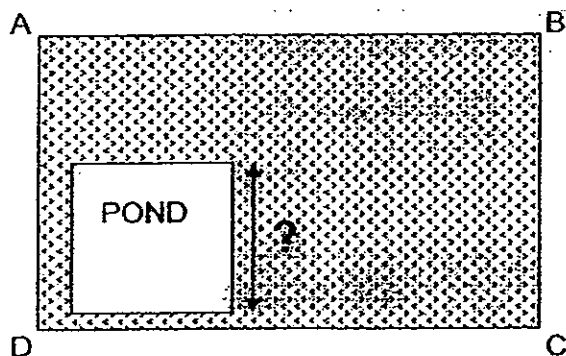
40. Leonard has 12 cards. Some are rectangular and some are triangular. The cards have 40 sides altogether. How many rectangular cards does Leonard have?

3 sides          4 sides

_____ rectangular cards

14
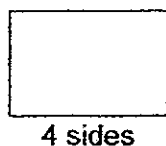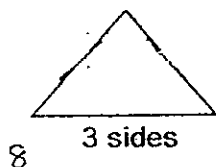
For each of the following questions, show your workings and mathematical statements in the space below each question. Write your answer in the answer space provided.

41. Desmond and Heather had 280 stickers altogether. Desmond had 30 more stickers than Heather. Desmond used $\frac{1}{5}$ of his stickers. How many stickers had Desmond left?

42. The figure below is made up of squares X and Y and rectangle Z.

(a) Find the breadth of rectangle Z.
(b) Find the perimeter of square X.
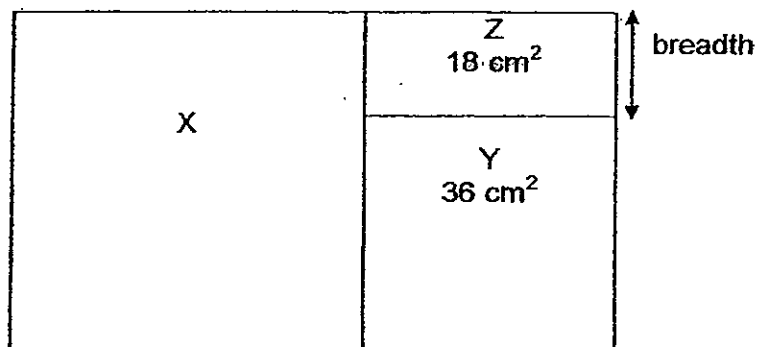
43. A belt costs twice as much as a purse. A briefcase costs $80 more than a belt. The total cost of a belt, a purse and a briefcase is $2530.

    (a) What is the cost of a purse?

    (b) What is the total cost of a belt and a briefcase?

44. Mark and Brian have a total of $260. Mark and Arthur have a total of $680. If Arthur has 5 times as much money as Brian, how much money does Mark have?

69

45. Nicole had an equal number of pens and markers at first. She gave half of the pens to her brother and bought another 21 markers. In the end, she had thrice as many markers as pens. How many pens had she at first?

## EXAM PAPER 2012

SCHOOL : NAN HUA
SUBJECT : PRIMARY 4 MATHEMATICS

TERM : SA2

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| 4 | 3 | 3 | 2 | 3 | 1 | 4 | 4 | 4 | 4 | 2 | 4 | 1 | 2 | 2 | 1 | 3 |

| Q18 | Q19 | Q20 |
|-----|-----|-----|
| 3 | 1 | 4 |

21)44.22   23)12687   24)7¾   25)4   26)2.56

27)19   28)320g   29)30°   30)54°   31)1 L 750ml

32)4h 15min   33)48 coins   34)54 cupcakes   35)$984

36)124   37)      38)7/18   39)7m
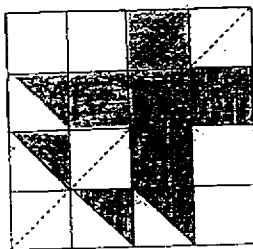
40)12 x 4 = 48
   48 − 40 = 8
   4 − 3 = 1
   8 x 1 = 8
   12 − 8 = 4

41)No.of stickers weather had: 280 − 30 = 250
                           250 ÷ 2= 125
No.of seickers Desmond had at first: 125 + 30 = 155
155 x 4/5 = 124
Desmond had 124 stickers left.

Page 1 to 2                    page 1

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42)a)Length of sq. y: $\sqrt{36cm_2}$ = 6cm
    Breadth of rect. Z: 18cm2 ÷ 6cm = 3cm
    The breadth of rec Z is 3cm

  b)Length of sq. X: 6cm + 3cm = 9cm
    Per. Of sq. X: 9cm x 4 = 36cm
    The perimeter of square X is 36cm

43)Briefcase

| u | u | $80 |

Belt

| u | u |

Purse

| u |
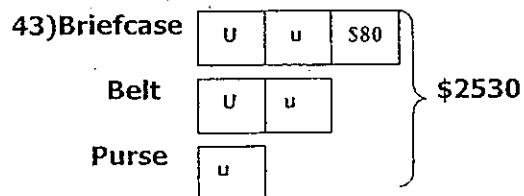
$2530

  a)5u→$2530 − $80 = $2450
    u→$2450÷5 = $490
    the cost of a purse is $490.

  b)2u→$490 x 2 = $980
    Briefcase→$980 + $80 = $1060
    $1060 + 980 = $2040
    The total cost is $2040.

44)

M | ? |

$680

A | | | | | |

$260

B | |

M | ? |

$680 + $260 = $940
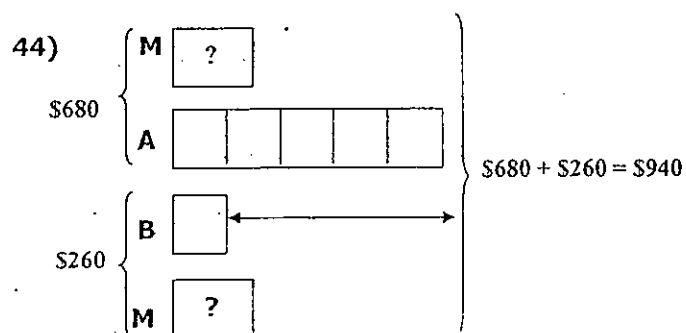
  $680 − $260 = $420
  $420÷4 = $105
  $260 − $105 = $155
  Mark have $155

45)P | | ⋈ | gave away

M | | | 21 |

  21 x 2 = 42
  She had 42 pens at first