NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 – 2014
PRIMARY 6

MATHEMATICS

Paper 1

Section A: 15 Multiple Choice Questions (20 marks)

Section B: 15 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 the calculator for Paper 1.**

Marks Obtained

Paper 1		**/ 40**
Paper 2		**/ 60**
Total		**/ 100**

Name : _____ **(** **)**

Class : _____

Date : 5 March 2014 **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 answe

Make your choice (1, 2, 3 or 4) and shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

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1. How many quarters are there in 4 wholes?

   (1) 1

   (2) $\frac{1}{16}$

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

   (4) 16

2. $\frac{2}{3} \div \frac{3}{8} =$ _____.

   What is the missing number statement in the blank?

   (1) $\frac{2}{3} \times \frac{3}{8}$

   (2) $\frac{2}{3} \times \frac{8}{3}$

   (3) $\frac{3}{2} \times \frac{3}{8}$

   (4) $\frac{3}{2} \times \frac{8}{3}$

3. Rachel was given $\frac{1}{3}$ of a cake She ate $\frac{2}{5}$ of it.
What ~~factiom~~ fraction of the original cake did she eat?

(1) $\frac{1}{15}$

(2) $\frac{2}{15}$

(3) $\frac{4}{15}$

(4) $\frac{5}{6}$

4. The table below shows the number of books read by 36 pupils in Primary 6H.

Number of books read by each pupil	0	1	2	3	4
Number of pupils	3	9	12	7	5

What fraction of the pupils in Primary 6H read at least 2 books?

(1) $\frac{1}{12}$

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

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

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

5. 25% of a number is 44. What is the number?

(1) 11

(2) 33

(3) 132

(4) 176

6. $\frac{2}{5}$ of a class are girls. The ratio of the number of boys to the number of girls in that class is _____.

(1) 2 : 3

(2) 3 : 2

(3) 2 : 5

(4) 3 : 5

7. Jenny has 2 times as many lollipops as Amy.
Tom has 3 times as many lollipops as Jenny.
What is the ratio of Jenny's lollipops to Amy's lollipops to the total number of lollipops?

(1) 1 : 2 : 6

(2) 2 : 1 : 6

(3) 1 : 2 : 9

(4) 2 : 1 : 9

8. The ratio of the number of women to the number of men at a concert is 3 : 4.
There are 84 adults at the concert.
How many men are there?

(1) 12

(2) 36

(3) 48

(4) 63

9. If ☼ - ☾ = 1

☼ + ☾ = 35

then,

☼ + ☾ + ☾ = ?

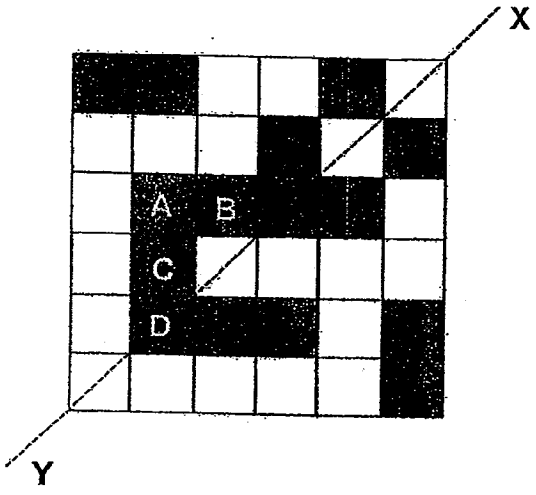
(1) 34

(2) 36

(3) 52

(4) 53

10. Which square below must be **unshaded** to make the figure symmetrical along the line XY?



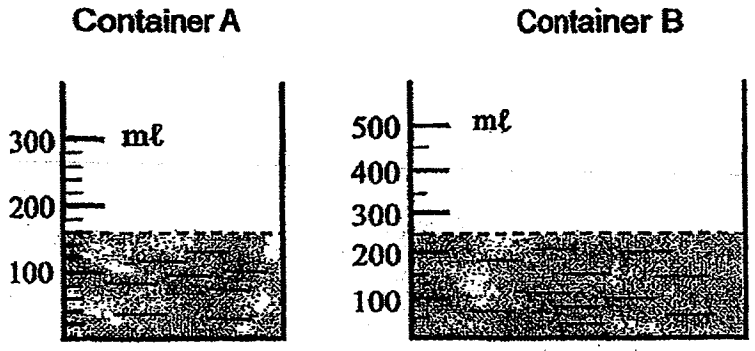
1) A

2) B

3) C

4) D

11. The diagram below shows 2 containers (A and B) partly filled with water.



What is the average amount of water in each container?

(1) 200 mℓ

(2) 205 mℓ

(3) 210 mℓ

(4) 215 mℓ

12. At a Sports Carnival, $\frac{2}{3}$ of the number of boys is equal to $\frac{3}{5}$ of the number of girls. If there are 50 more girls than boys, how many pupils are there at the Sports Carnival altogether?

(1) 450

(2) 500

(3) 750

(4) 950

13. Kenneth spent $80 of his allowance and saved the rest.
When he increased his spending by 10%, his savings decreased by 20%.
How much was his allowance?

(1) $ 40

(2) $ 88

(3) $ 120

(4) $ 160

14. Sam saw the advertisement below outside a watch shop.

Find the percentage decrease in the selling price of the watch.

(1) 25 %

(2) 30 %

(3) $33\frac{1}{3}$ %

(4) $133\frac{1}{3}$ %

15. There are some turkeys, chickens and ducks in a farm. $\frac{2}{5}$ of the animals are turkeys, the rest are chickens and ducks. The ratio of the number of chickens to the number of ducks is 7 : 8 .
If there are 20 more turkeys than ducks, how many farm animals are there?

(1) 70

(2) 80

(3) 100

(4) 250

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** and write your answer in the space provided. Give your answers in the units stated.

16. 6 pizzas were shared among some children. If each of them received $\frac{3}{8}$ of a pizza, how many children were there?

Ans: _____ children

17. Tom has $\frac{3}{4}$ m of ribbon. If he wants to cut the ribbon into pieces of $\frac{1}{3}$ m each, how many such pieces of ribbon will he get?

Ans : _____ pieces

18. Mrs Gomi paid $160 for an oven during a sale after a 20% discount. What was the original price of the oven?

Ans : $_____

3

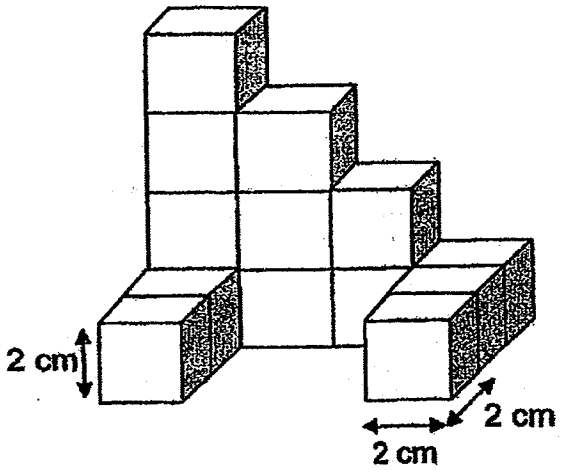
19 Find the value of 0.8 ÷ 100. Give your answer in decimal form.

Ans: _____

20. The ratio of the number of rabbits to the number of hamsters in a pet shop is 2 : 5. If there are 35 hamsters, how many rabbits are there in the pet shop?

Ans : _____ rabbits

21. The solid below is formed by stacking up identical 2-cm cubes. Find the volume of the solid below.



Ans: _____ cm^3

22. The ratio of the number of apples to the number of oranges is 7 : 8. The number of pears is $\frac{1}{4}$ of the number of oranges. What is the ratio of the number of apples to the number of oranges to the number of pears?

Ans : _____

23. 12 : 18 : 27 = 8 : ? : 18

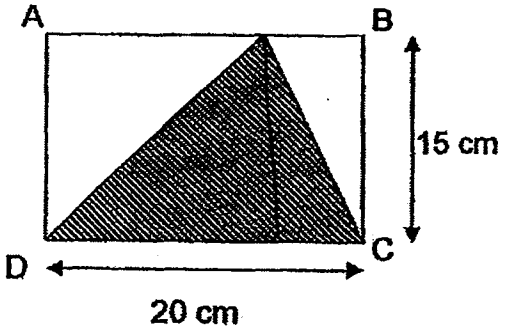
What is the missing number in the box?

Ans : _____

24. Tom and Bruce shared some marbles in the ratio of 4 : 5. Bruce lost half of his marbles. What is the new ratio of the number of marbles Tom has to the number of marbles Bruce has in the end?

Ans : _____

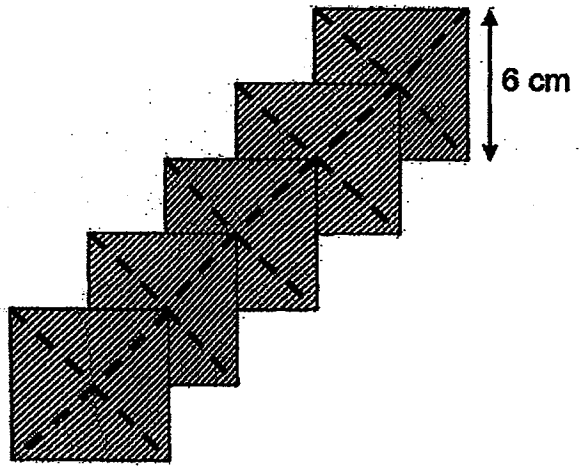
25. ABCD is a rectangle. Given that DC is 20 cm and BC is 15 cm, find the area of the unshaded parts.



Ans: _____ cm^2

4

26. The figure below is made up of overlapping squares of sides 6 cm.
Find the area of the shaded figure.
(The figure is not drawn to scale.)



Ans : _____ cm^2

27. A ribbon measuring 8 m long is cut into smaller pieces of $\frac{3}{4}$ m each. What is the length of the leftover piece? Express your answer in its simplest form.

Ans : _____ m

4

28. At 9 a.m., a tap was turned on to fill an empty tank with water. At 12 p.m., the tank was $\frac{1}{3}$ filled with water. At what time would the tank be $\frac{8}{9}$ filled with water flowing from the tap at the same rate?

Ans:_____ p.m.

29. Ray saves 20 cents each day. He saves $\frac{1}{3}$ of what his brother saves each day. How many days will it take for both of them to save $56 together?

Ans: _____ days

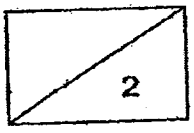
4

30. James had 200 game cards at first. He gave away 20% of them. His father then bought him 20% of what he had left. How many game cards did James have in the end?

Ans: _____

End-of-Paper 1

Remember to check your work



NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1-2014
PRIMARY 6

MATHEMATICS

Paper 2

Total Time for Paper 2:1 hour 40 minutes

INSTRUCTION TO CANDINDATES

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 intructions carefully
4. Answer all questions and show your workings clearly.
5. You are allowed to use a calculator.

Marks Obtained

Total		/ 60

Name: _____( )

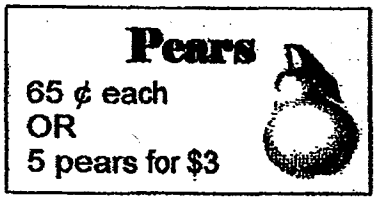
Class: _____

Date:5 March 2014 Parent's Signature :_____

Paper 2 (60 marks)

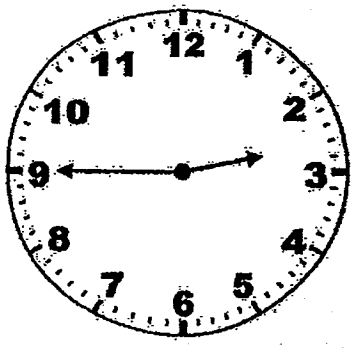
Questions 1 to 5 carry 2 marks each. Show your workings clearly in the space below it and write your answer in the space provided. Give your answers in the units stated.

1. Alice wanted to buy 17 pears from a fruit stall. The pears were sold in 2 ways as shown below. What was the **least** amount of money that she could pay for the pears?



Ans: $_____

2. The time on a clock is 1445.
What will the be after the minute hand made a $\frac{3}{4}$ turn (in the clockwise direction) ?Give your answer in 24h clock.



Ans:_____

4

3. School A has twice as many pupils as school B.

$\frac{2}{9}$ of the pupils in School A are girls. $\frac{5}{9}$ of the pupils in School B are girls.

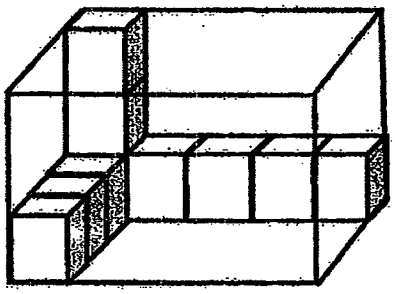
What is the ratio of School A's girls to School B's boys?

Express your answer in its simplest form.

Ans: _____

4. The figure below a rectangular transparent box partly filled with identical cubes. Each cube measures 1cm on any of its side.

What is the volume of rectangular box?



Ans: _____ cm^3

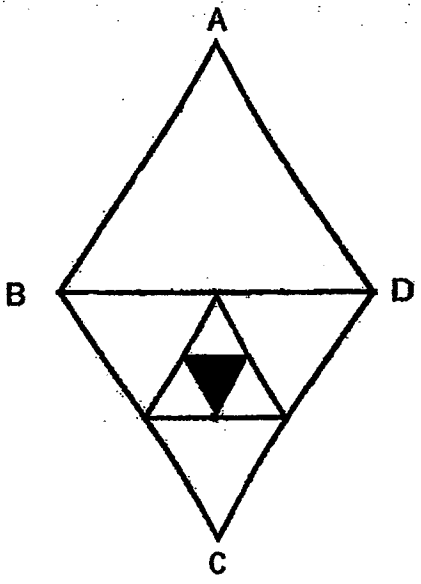
4

5. In the figure below,ABD and BCD are indentical equilateral triangles

All the smaller triangles are formed by connecting the midpoints of the sided of the bigger triangle.

What percentage of the whole figure ABCD is shaded?

Corret your answer to 2 decimal places.



Ans: _____ %

2

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. The total mass of Basket A and Basket B is 131 kg and the total mass of Basket B and Basket C is 87 kg. Basket A is thrice as heavy as Basket C. What is the total mass of the three baskets?

Ans: _____ [3]

7. Jim and Jane had 560 stickers altogether. When Jim gave $\frac{2}{7}$ of his stickers to Jane, Jim had 240 stickers left. How many stickers did Jane have at first?

Ans: _____ [3]

6

8. Jack spent $\frac{1}{5}$ of his money and an additional $4 on a book. He then spent $\frac{3}{4}$ of the remaining money and an additional $6 on a shirt. If he saved the remaining $14, how much money did he have at first?

Ans: _____ [3]

9. Carmen spent $900 of her savings on a bag and 30% of her remaining money on a pair of shoes. if she had half of her savings left,how much was her savings?

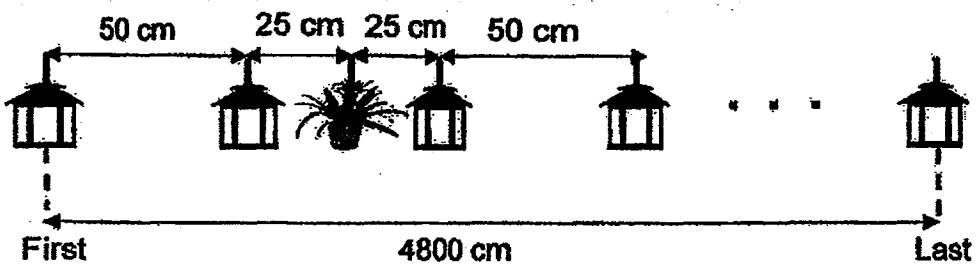
Ans: _____ [3]

6

10. Some lanterns and plants were hung as shown in the diagram below. A plant was placed after every 2 lanterns. The distance between two lanterns was always 50 cm and the distance between the plant and the lantern was always 25 cm. The distance between the first and the last lantern was 4800 cm.

a) Find the total number of plants used in such an arrangement.

b) Find the total number of lanterns used in such an arrangement



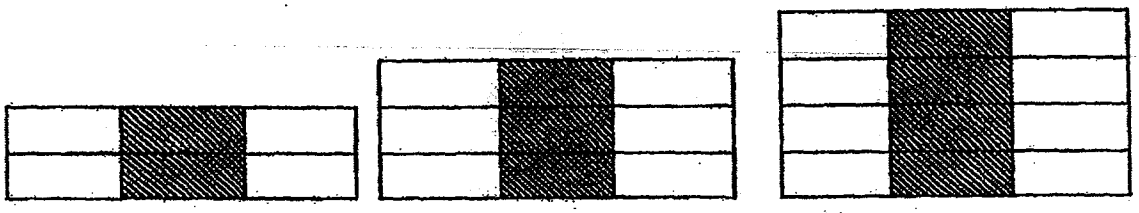
Ans: (a)_____ [1]

(b)_____ [2]

3

11. The patterns below consist of shaded and unshaded rectangles.

Study the patterns carefully and answer the following questions.



Pattern 1 Pattern 2 Pattern 3

Pattern	Shaded rectangles	Total rectangles
1	2	6
2	3	9
3	4	12
.	.	.
.	.	.
.	.	.
100	?	?

(a) Find the number of shaded rectangles in Pattern 100.

(b) Find the total number of rectangles in Pattern 100.

(c) Find the number of unshaded rectangles in Pattern 100.

Ans: (a)_____ [1]

(b)_____ [1]

(c)_____ [1]

3

12. Sharon wishes to buy a dress but does not have enough savings. If she increases her savings by 25%, she would need another $12. If she increases her savings by 35%, she would be able to buy the dress and has $16 left. How much does the dress cost?

Ans:_____[4]

4

13. Mary baked some chicken pies and apple pies. The ratio of the number of chicken pies to the number of apple pies was 3 : 5. After giving away an equal number of each type of pies, the ratio of the number of chicken pies left to the number of apple pies,left was 7: 13. If she had 1776 pies at first, how many pies did she give away in total?

Ans: _____ [4]

4

14. In a carton, $\frac{2}{3}$ of the fruits were pears and the rest were apples. If Meiling took out 18 pears and replaced with the same number of apples, the number of pears would be 80% of the number of apples. What was the total number of fruits in the carton?

Ans: _____ [4]

4

15. Simon and Peter had a total of 900 cards.

Simon gave $\frac{1}{5}$ of his cards to Peter. Peter then gave $\frac{1}{4}$ of his cards to Simon.

In the end, each of them had the same number of cards.

How many cards did Simon have at first?

Ans: _____ [5]

5

16. A number of tourists visited the Universal Studios Singapore on Monday.
The ratio of the number of adults (excluding senior citizens) to the number of children is 3 : 5.
The ratio of the number of adults to the number of senior citizens is 4 : 1.
The price of the admission tickets were shown below:

Admission	Prices for each ticket
1 Adult	$ 74
1 Child	$ 54
1 Senior citizen	$ 36

The Universal Studios Singapore collected $ 49 824 on that day.
How many children visited the Universal Studios Singapore on that day?

Ans: _____ [5]

5

17. Polly had 360 dolls more than Ariel at first.

After Polly gave away $\frac{1}{4}$ of her dolls and Ariel gave away $\frac{2}{3}$ of her dolls, they had 764 dolls altogether.

How many dolls did they give away altogether?

Ans: _____ [5]

5

18. Jon, Molly and Chris shared some sweets. The ratio of the total number of sweets received by Jon and Molly to the number of sweets received by Chris was 2 : 5. When Chris gave 25 sweets to Jon and 31 sweets to Molly, and Jon gave 12 sweets to Molly, each of them had the same number of sweets. Find the total number of sweets Jon had at first.

Ans: _____ [5m]

End of Paper 2

Remember to check your work.

5

Answer Ke

EXAM PAPER 2014
SCHOOL : NAN HUA
SUBJECT : PRIMARY 6 MATHEMATICS

TERM : CA1

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

16)16 children **17)2 pieces** **18)$200** **19)0.008** **20)14 rabbits**

21)112 cm^3 **22)7 : 8 : 2** **23)12** **24)8 : 5** **25)150 CM^2**

26)144 CM^2 **27) ½** **28)5 P.M.** **29)70 days** **30)192**

Paper 2

1)17 ÷ 5= 3r2
3 x $3 = $9
2 x $0.65 = $1.30
$9 + $1.30 = $10.30

2)1530

3)1 : 1

4)5 x 4 x 3 = 60 cm^3

5)shaded→1
BCD→4 x 4 = 16
Fig→16 x 2 = 32
1/32 x 100% ≈3.13%

6)131 – 87 = 44
2u→44
1u→44÷2 = 22
87 – 22 = 65
4u→22 x 2 = 88
88 + 65 = 153 kg

7)5u→240
1u→240÷5 = 48
7u→48 x 7 = 336
560 – 336 = 224 stickers

8)Remaining
¼ →$6 + $14 = $20
1→$20 x 4 = $80

Total
$80 + $4 = $84
$84÷4 = $21
$21 x 5 = $105

9)3u + $900→7u
7u – 3u = 4u
4u→$900
u→$900÷4 = $225
10u→$225 x 10 = $2250
$2250 + $900 = $3150

10)4800 cm÷50 cm = 96

a)96 + 1 = 97
97÷2 = 48 r1 = 48
b)96 + 1 = 97

11)a)shaded rectangles→n + 1
n→100
n + 1 = 100 + 1 = 101

b)total rectangles→3n + 3
n→100
3n→100 x 3 = 300
300 + 3 = 303

c)303 – 101 = 202

12)135% - $16→125% + $12
135% - 125% →$16 + $12
10% →$28
1% →$28÷10 = $2.80
125% →$2.80 x 125 = $350
$350 + $12 = $362

13)15u + 9u →1776
24u →1776
4u →1776÷6 = 296

14)6u – 4u = 2u
2u →18
U →18÷2 = 9
9u →9 x 9 = 81

15)900÷2 = 450
3/9 →450
4/9 →450÷3 x 4 = 600
1/9 →150
450 – 150 = 300
4/5 →300
5/5 →300÷4 x 5 = 375

16)12 x $74 = $888
20 x $54 = $1080
3 x $36 = $108
$888 + $1080 + $108 = $2076
$49824÷$2076 = 24
24 x 20 = 480

17)508

18)14u – 6u = 8u
8u→25 + 31 = 56
u→56÷8 = 7
7u→7 x 7 = 49
49 – 25 = 24
24 + 12 = 36