



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2015
PRIMARY 5**

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. The use of calculator is not allowed.
5. Shade your answers in the Optical Answer Sheet (OAS) provided for Questions 1 – 15.

Marks Obtained

Paper 1		/ 40
Paper 2		/ 60
Total		/ 100

Name : _____ ()

Class : _____

Date : 2 Nov 2015

Parent's Signature : _____

Section A

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 and shade your answer (1, 2, 3 or 4) on the Optical Answer Sheet.
(20 marks)

1. What is the value of the digit '7' in 674 300?

- (1) 70
- (2) 7 00
- (3) 70 000
- (4) 700 000

2. Find the value of $20 + (15 - 5) \times 4$.

- (1) 15
- (2) 60
- (3) 120
- (4) 140

3. What is the missing number in the blank below?

$$904\,573 = 900\,000 + 4000 + \underline{\hspace{2cm}} + 3$$

- (1) 570
- (2) 500
- (3) 57
- (4) 50

4. Which one of the following is equivalent to $\frac{13}{7}$?

(1) $1\frac{3}{7}$

(2) $1\frac{6}{7}$

(3) $6\frac{1}{7}$

(4) $13\frac{1}{7}$

5. What is the value of $\frac{1}{5} + \frac{3}{4}$?

(1) $\frac{4}{9}$

(2) $\frac{6}{19}$

(3) $\frac{15}{20}$

(4) $\frac{19}{20}$

6. How many thousandths are there in 8.23?

(1) 823

(2) 23

(3) 3

(4) 8 230

7. What is the value of 1.87×300 ?

- (1) 5.81
- (2) 58.1
- (3) 581
- (4) 5 610

8. What is the missing number in the box below?

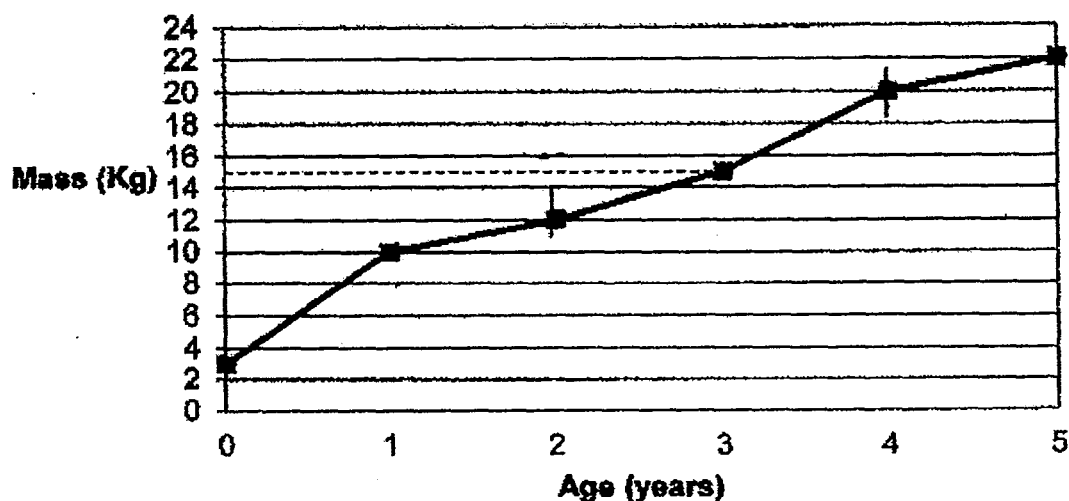
$$2 : 6 = 5 : \boxed{?}$$

- (1) 9
- (2) 12
- (3) 15
- (4) 30

9. The perimeter of a square is $\frac{2}{9}$ m. What is the length of each side of the square?

- (1) $\frac{4}{9}$ m
- (2) $\frac{8}{9}$ m
- (3) $\frac{1}{18}$ m
- (4) $\frac{4}{81}$ m

10. The line graph below shows Peter's mass over the last 5 years.



What was the increase in Peter's mass from 2 to 4 years old?

- (1) 8 kg
- (2) 12 kg
- (3) 20 kg
- (4) 47 kg

11. The table below shows the marks scored by David during his year-end examination.

Subject	English	Chinese	Mathematics	Science
Marks	70	65	?	75

He scored an average of 75 marks for the 4 subjects above.

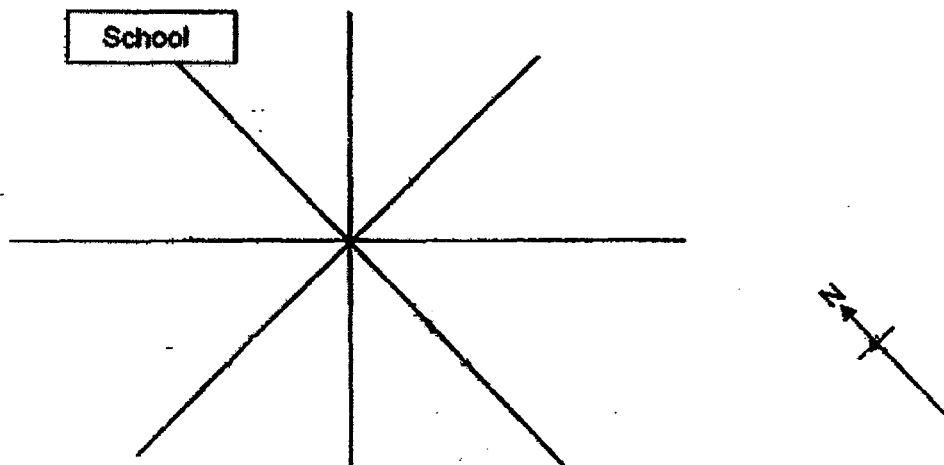
How many marks did he score for Mathematics?

- (1) 70
- (2) 90
- (3) 95
- (4) 100

12. Andy, Bee Ling and Cyrus shared some money in the ratio 1 : 2 : 6. After Cyrus spent \$36 and Andy received some money, each of them had the same amount of money left. How much money did Andy have at first?

- (1) \$81
- (2) \$18
- (3) \$9
- (4) \$4

13. In the diagram below, not drawn to scale, Thomas is facing south-east. In which direction must he turn to face the school?



- (1) 90° clockwise
- (2) 135° anti-clockwise
- (3) 135° clockwise
- (4) 180° clockwise

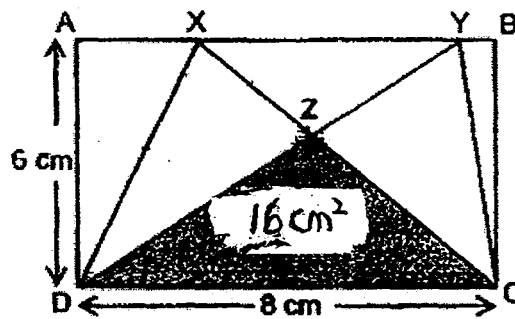
14. Look at the pattern below.



In which position will the heart shape appear in?

- (1) 43rd
- (2) 42nd
- (3) 41st
- (4) 40th

15. In the figure below, not drawn to scale, ABCD is a rectangle measuring 8 cm by 6 cm. The area of triangle DZC is 16 cm². Find the area of triangle XDZ.



- (1) 6 cm²
- (2) 8 cm²
- (3) 16 cm²
- (4) 24 cm²

Section B (20 marks)

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.

16. What is the value of 300 thousands and 59 ones?

Ans: _____

17. Express 5 kg 26 g in grams.

Ans: _____ g

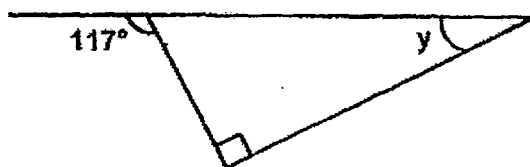
18. Express 37% as a decimal.

Ans: _____

19. Express $\frac{13}{25}$ as a percentage.

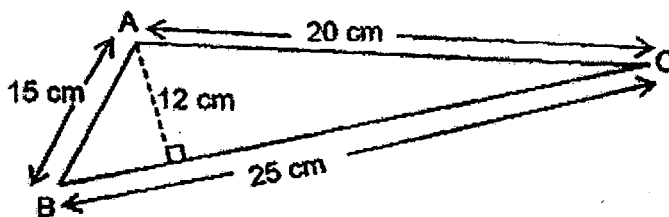
Ans: _____ %

20. The figure below is not drawn to scale. Find $\angle y$.



Ans: _____^o

21. What is the area of triangle ABC?



Ans: _____ cm^2

22. A whole number X becomes 500 when it is rounded off to the nearest hundreds. What could be the largest possible value for X ?

Ans: _____

23. John counted the pens in a container and recorded the number of colour pens in the table below.

Colour of pens	Number of pens
Blue	8
Green	3
Red	5

What is the ratio of all the blue pens to the total number of pens? Express your answer in its simplest form.

Ans: _____

24. A box measures 22 cm by 15 cm by 10 cm. How many 1-cm cubes can be placed in the box completely?

Ans: _____

25. There were twice as many girls as boys at a carnival. 412 boys were at the carnival. How many children were there at the carnival altogether? Round off your answer to the nearest tens.

Ans: _____

Questions 25 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which requires units, give your answers in the units stated. (10 marks)

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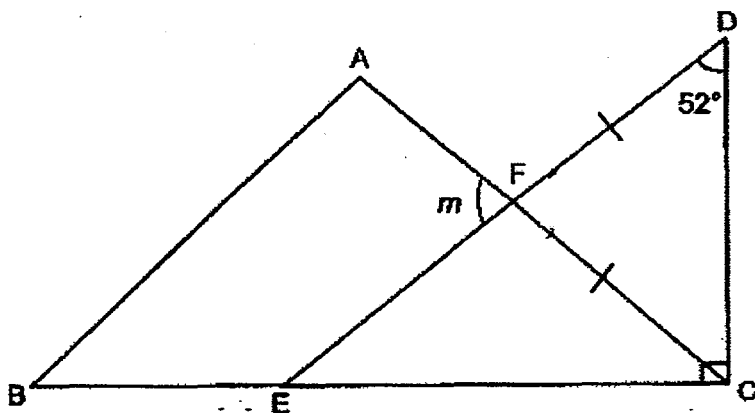
26. The table below shows the postage charges for sending a parcel.

Mass	Postage Charges
First 5 kg	\$ 12
Additional 1 kg or part thereof	\$ 3

How much would Mr Bala have to pay for sending a parcel weighing 14 kg?

Ans: \$ _____

27. The figure below is not drawn to scale. Line $FD =$ Line FC and $\angle CDE = 52^\circ$. Find $\angle m$.



Ans: _____°

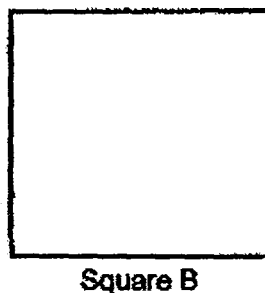
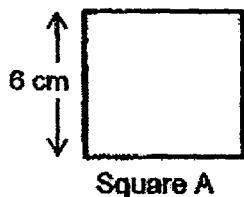
28. In a game, a player will get 4 points if he wins. The player will get 5 extra points for winning every 5 games. How many games does a player win altogether if he has a total of 100 points?

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Ans: _____



29. The ratio of the perimeter of square A to the perimeter of square B is 3 : 5. Square A has a side of 6 cm. What is the perimeter of square B?



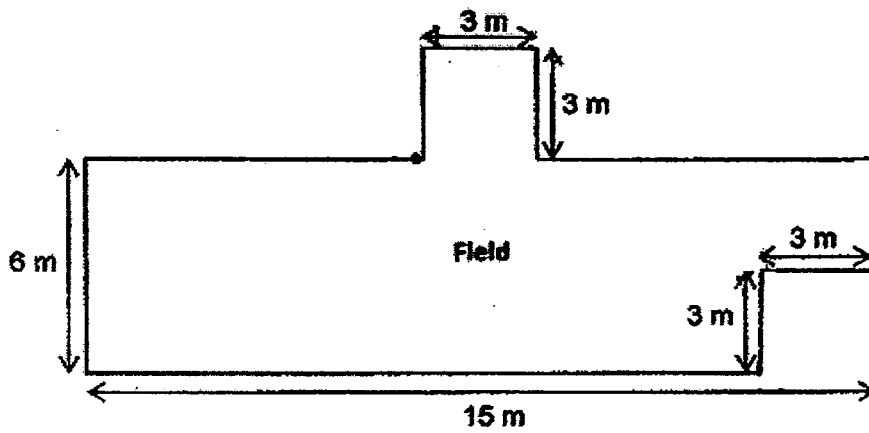
Ans: _____ cm



30.

The diagram below shows a field. Each tree was planted at 3 m apart along every side of the field. How many trees were planted altogether?

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Ans: _____

END OF PAPER 1



**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2015
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. The use of calculator is allowed.

Marks Obtained

Total		/ 60
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Name : _____ ()

Class : _____

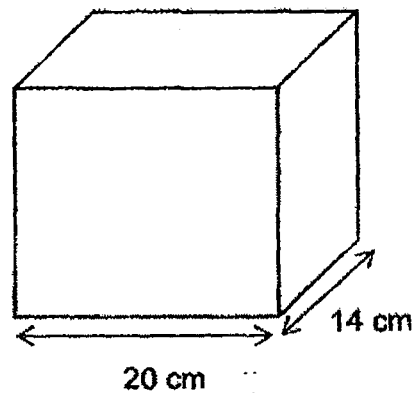
Date : 2 Nov 2015 **Parent's Signature :** _____

Paper 2

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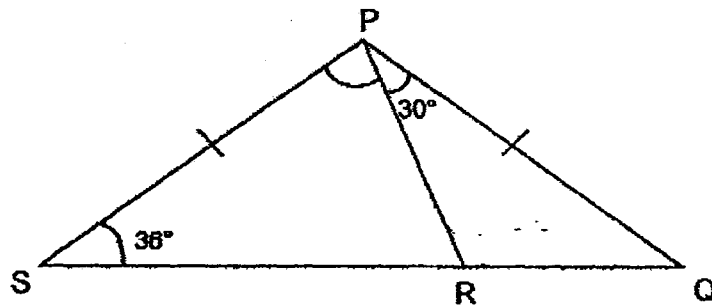
Questions 1 to 5 carry 2 marks each. Show your workings clearly and write your answer in the space provided. For questions which require units, give your answers in the units stated. (10 marks)

1. A box has a length of 20 cm and a width of 14 cm. The height of the box is twice its width. Find the volume of the box.



Ans: _____ cm³

2. The figure below shows an isosceles triangle PSQ which is not drawn to scale. Line PS = Line PQ. Given that $\angle PSR = 36^\circ$ and $\angle QPR = 30^\circ$, find $\angle SPR$.



Ans: _____ °

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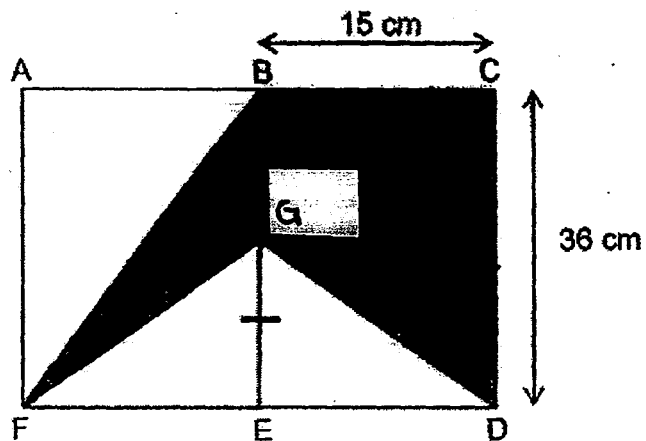
3. The original price of a T-shirt is \$28. At a sale, it is sold at a discount of 30%. How much does Diana have to pay if she buys 5 such T-shirts at the discounted price?

Ans: \$_____

4. Wei Ming and Shawn scored an average of 87 marks for their tests. If Shawn scored 6 marks more than Wei Ming, how many marks did Wei Ming score?

Ans:_____

5. The figure below is made up of 2 identical rectangles, ABEF and BCDE. Given that line BG = line GE, line BC = 15 cm and line CD = 36 cm, find the total shaded area.



Do not write
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Ans: _____ cm²



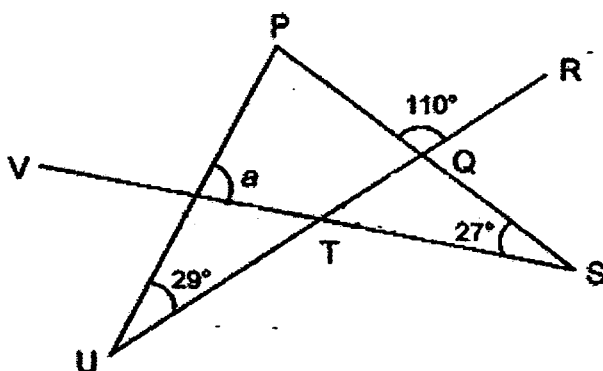
For questions 6 to 18, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

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6. Ribbon A is 94 cm shorter than Ribbon B. Ribbon C is 107 cm longer than Ribbon A. The total length of the 3 ribbons is 426 cm. What is the length of Ribbon C?

Ans: _____ [3]

7. In the figure below, not drawn to scale, line PU, line PS, line UR and line SV are straight lines. $\angle PQR = 110^\circ$, $\angle PSV = 27^\circ$ and $\angle RUP = 29^\circ$. Find $\angle a$.



Ans: _____ [3]

8. There were some children at a carnival. $\frac{3}{11}$ of the children are girls and the rest are boys. After 48 boys left the carnival, the number of girls was half the number of remaining boys. How many children were at the carnival at first?

Do not write
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Ans: _____ [3]

9. The usual price of a laptop is \$1600. Mr Chan was given a discount of 15%. How much did Mr Chan pay for the laptop if he had to pay an additional 7% GST after the discounted price?

Ans: _____ [3]

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10. 5 boys sold an average of 26 bookmarks for charity. After 3 more girls joined them, the average number of bookmarks sold by the 8 children became 35. What was the total number of bookmarks sold by the 3 girls?

Ans: _____ [3]

11. George is 7 years old now and his mother is 43 years old. In how many years' time, will George be $\frac{1}{4}$ as old as his mother?

Ans: _____ [4]

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12. Mrs Sivia and Mrs Tan went to the same grocery store to buy some flour and sugar. Mrs Sivia bought 3 kg of flour and 2 kg of sugar for \$10.90. Mrs Tan bought 6 kg of flour and 5 kg of sugar for \$23.20. Find the total cost of 1 kg of flour and 1 kg of sugar.

Ans: _____ [4]

13. At a food centre, a plate of duck rice costs \$3.50 and a plate of chicken rice costs \$2.50. Mr Soh sold 15 more plates of duck rice than chicken rice on Sunday. He collected \$412.50 in total on that day. How many plates of chicken rice did he sell on that Sunday?

Ans: _____ [4]

14. Tom filled Container X completely with water and Container Y with some water. After Tom transferred some water from Container X to Container Y, Container Y was filled to the brim while the height of water in Container X dropped to 12 cm.

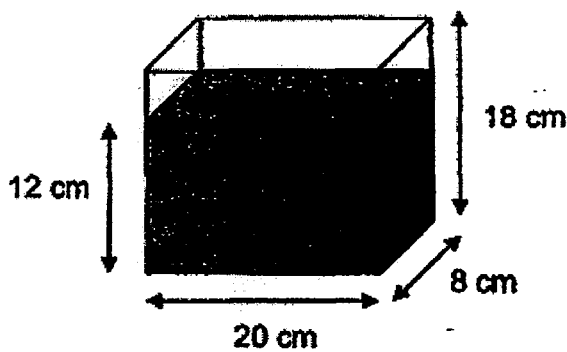
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(a) How much water was transferred from Container X to Container Y?

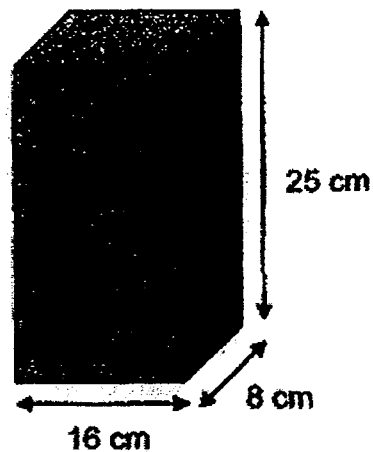
(b) What was the amount of water in Container Y in the beginning?

Give your answer in litres.

After the transfer of water:



Container X



Container Y

Ans: (a) _____ [2]

(b) _____ [2]



15. A bus left the interchange with some passengers on board. At the first stop, 4 passengers boarded the bus. When it reached the second stop, $\frac{2}{5}$ of the passengers got off the bus. At the third stop, $\frac{3}{4}$ of the passengers got off the bus and 5 passengers boarded the bus. When the bus left the third stop, there were 8 passengers on the bus. How many passengers were on the bus when it left the interchange?

Do not write
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Ans: _____ 4]



16. Mrs Lee sold 320 cookies on Saturday. 40% of them were chocolate cookies, 75% of the remainder were durian cookies and the rest were strawberry cookies.

- a) How many durian cookies were sold on Saturday?
- b) What percentage of all the cookies sold were Strawberry cookies?

Do not write
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Ans: (a) _____ [3]

(b) _____ [2]



17. Amy, Beatrice and Calin had some stickers. Calin had 18 more stickers than Amy. Calin had $\frac{3}{4}$ as many stickers as Beatrice.

After Amy and Calin received a total of 36 stickers from Beatrice in the ratio of 3 : 1 respectively, all three girls had the same number of stickers.

(a) How many stickers did Calin have at first?

(b) What is the ratio of Amy's stickers to Beatrice stickers to Calin's stickers at first? Give your answer in the simplest form.

Do not write
in this space

Ans: (a) _____ [3]

(b) _____



18. There were 30 more 20-cent coins than \$1 coins in a box. The difference in value between all the \$1 coins and all the 20-cent coins is \$90. Express the number of \$1 coins as a fraction of the number of 20-cent coins. Give your answer in the simplest form.

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Ans: _____ [5]



END OF PAPER 2

**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 2015
PRIMARY 5 MATHEMATICS
PAPER 1**

- 1) 3 2) 2 3) 1 4) 2 5) 4 6) 4 7) 3 8) 3 9) 3
10) 1 11) 2 12) 3 13) 2 14) 1 15) 2

16) 300 059

17) 5026 g

18) 0.37

19) 52%

20) $117^\circ - 90^\circ = 27^\circ$

21) $1/2 \times 25 \times 12 = 150$ sq cm

22) 549

23) $8:16 = 1:2$

24) $22 \times 15 \times 10 = 3300$ cubes

25) $1u - 412$
 $3u - 3 \times 412 = 1236 \approx 1240$

26) $12 + 9 \times 3 = \$39$

27) $180^\circ - 52^\circ - 52^\circ = 76^\circ$

28) $4 \times 5 = 20$
 $20 + 5 = 25$
 $100 \div 25 = 4$
 $4 \times 5 = 20$ games

29) $6 \times 4 = 24$
 $3u - 24$ cm
 $5u - 5/3 \times 24 = 40$ cm

30) 16 trees were planted altogether

PAPER 2

1) $20 \times 14 \times 28 = 7840$ cubic cm

2) $180^\circ - 36^\circ - 36^\circ - 30^\circ = 78^\circ$

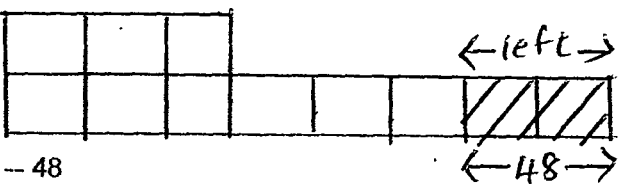
3) $70/100 \times 28 \times 5 = \98

4) $87 \times 2 = 174$
 $174 - 6 = 168$
 $168 \div 2 = 84$ marks

5) $36 \times 15 = 540$ sq cm

6) $426 - 107 - 94 = 225$ cm
 $225 \div 3 = 75$ cm
 $75 + 107 = 182$ cm

7) Angle QTS = $180^\circ - 27^\circ - 110^\circ = 43^\circ$
Angle a = $43^\circ + 29^\circ = 72^\circ$

8) 
 $2u = 48$
 $11u = 11/2 \times 48 = 264$ children were at the carnival at first

9) $85/100 \times \$1600 = \1360
 $107/100 \times \$1360 = \1455.20

10) $26 \times 5 = 130$
 $8 \times 35 = 280$
 $280 - 130 = 150$ bookmarks were sold by the 3 girls

11) $43 - 7 = 36$
 $3u = 36$
 $1u = 1/3 \times 36 = 12$
 $12 - 7 = 5$ years' time

12) $3F + 2S = \$10.90$
 $6F + 5S = \$23.20$
Difference, $3F + 3S = \$ (23.20 - 10.90) = \$ 12.30$
Hence, $1F + 1S = \$12.30 \div 3 = \4.10

13) $15 \times \$3.50 = \52.50
 $\$412.50 - \$52.50 = \$360$
 $\$3.50 + \$2.50 = \$6$
 $\$360 \div \$6 = 60$ plates of chicken rice sold on Sunday

14) $18 - 12 = 6$ cm
a) $20 \times 8 \times 6 = 960$ cubic cm
 $16 \times 8 \times 25 = 3200$ cubic cm
b) $3200 - 960 = 2240$ cubic cm = 2.24/

15) $8-5 = 3$
 $3 \times 4 = 12$
 $12 \div 3 = 4$
 $4 \times 2 = 8$
 $8 + 12 = 20$
 $20 - 4 = 16$ passengers were on the bus when it left the interchange

16a) $75/100 \times 60/100 \times 320 = 144$ durian cookies were sold on Saturday
b) $25/100 \times 60/100 \times 100\% = 15\%$

17a) $18 \div 2 = 9$
 $36 + 9 = 45$
 $45 \times 3 = 135$ stickers at first
b) $45 \times 4 = 180$ (Beatrice)
 $136 - 18 = 117$ (Amy)
 $A:B:C = 117:180:135 = 13:20:15$

18) $30 \times \$0.20 = \6
 $\$(90 + 6) = \96
 $\$(1 - 0.20) = \0.80
 $\$(96 \div 0.80) = 120$
 $120 + 30 = 150$
 $120/150 = 4/5$

