

Pei Chun Public School  
Continual Assessment 1 – 2012  
Mathematics  
Primary 6

**Paper 1 (Booklet A)**

You are not allowed to use a calculator.

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

Date: 28 February 2012

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

Total Time for Booklets A and B: 50 min

Maths Teacher : \_\_\_\_\_

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). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.  
( 20 marks )

1. The price of a flat when rounded off to the nearest thousand dollars is \$465 000.  
Which is the lowest possible price of the flat?

(1) \$464 499

(2) \$464 500

(3) \$465 499

(4) \$465 500

( )

2. A factory can produce 600 bottles of milk in an hour. How many bottles of milk can the factory produce in 15 minutes?

(1) 10

(2) 40

(3) 90

(4) 150

( )

3. Find the value of  $36 + 24 \div 3 - 2 \times 2$ .

(1) 16

(2) 36

(3) 40

(4) 48

( )

4. Simplify  $8m + 5 - m - 2 + 3m$ .

(1)  $4m - 3$

(2)  $4m + 3$

(3)  $10m - 3$

(4)  $10m + 3$

( )

5. Find the value of  $\frac{9}{10} \div \frac{6}{1}$ .

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

(2)  $\frac{5}{27}$

(3)  $5\frac{2}{5}$

(4)  $6\frac{2}{3}$

( )

6. Express  $7\frac{5}{6}$  as a decimal. Give your answer correct to 2 decimal places.

(1) 7.56

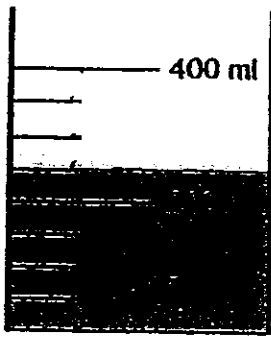
(2) 7.65

(3) 7.83

(4) 7.84

( )

7. The figure below shows a beaker with some water in it.

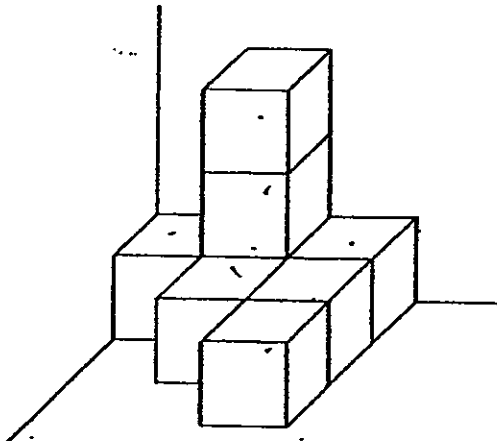


What is the volume of the water in the beaker?

- (1) 0.210 ℓ
- (2) 0.220 ℓ
- (3) 0.225 ℓ
- (4) 0.250 ℓ

( )

8. The solid figure below is made up of 1-cm cubes.

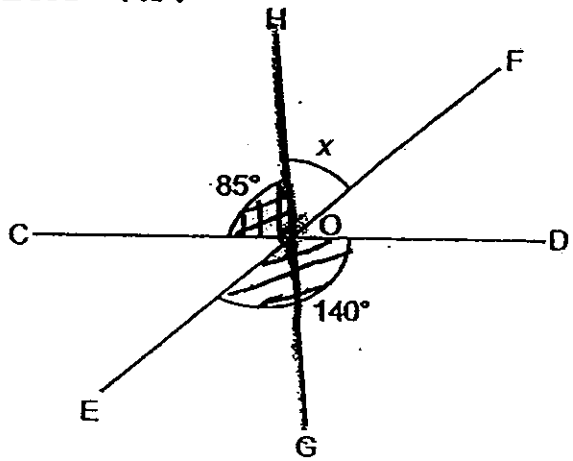


What is the volume of the solid figure?

- (1) 7 cm<sup>3</sup>
- (2) 8 cm<sup>3</sup>
- (3) 9 cm<sup>3</sup>
- (4) 10 cm<sup>3</sup>

( )

9. In the figure below, COD, EOF and GOH are straight lines.  $\angle COH = 85^\circ$  and  $\angle EOD = 140^\circ$ .

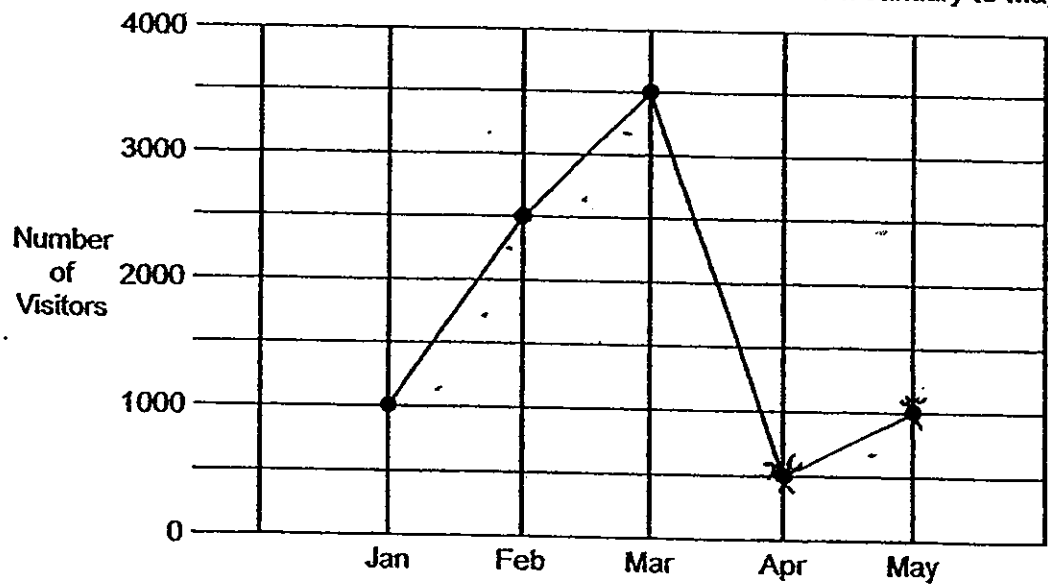


Find  $\angle x$ .

- (1)  $95^\circ$
- (2)  $55^\circ$
- (3)  $45^\circ$
- (4)  $40^\circ$

( )

10. The line graph below shows the number of visitors to the zoo from January to May.

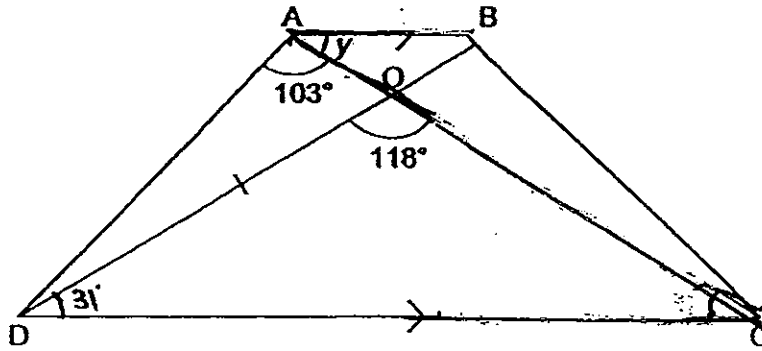


Between which 2 months was there the greatest increase in the number of visitors to the zoo?

- (1) Jan and Feb
- (2) Feb and Mar
- (3) Mar and Apr
- (4) Apr and May

( )

11. In the figure below, ABCD is a trapezium and  $CO = DO$ .



Find  $\angle y$ .

- (1)  $15^\circ$
- (2)  $31^\circ$
- (3)  $62^\circ$
- (4)  $77^\circ$

( )

12. The usual price of a wallet was \$80. During a sale, Sandy bought the wallet at a discounted price of \$64. What was the percentage discount on the wallet?

- (1) 20%
- (2) 25%
- (3) 75%
- (4) 80%

( )

13. Bala wants to pack 2 kg of salt into packets of  $\frac{5}{8}$  kg each. What is the greatest number of such packets Bala can pack?

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

( )

14. The ratio of the number of Cindy's sweets to the number of Jimmy's sweets was 2 : 5. After Cindy bought 64 sweets and Jimmy ate 64 sweets, the ratio became 2 : 1. How many sweets did Cindy have at first?

- (1) 8  
 (2) 16  
 (3) 32  
 (4) 48

( )

15. Each figure below is made up of shaded and unshaded squares.

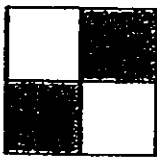


Figure 1

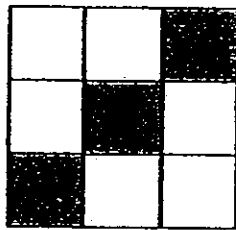


Figure 2

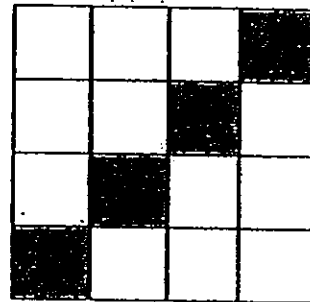


Figure 3

How many unshaded squares does Figure 30 have?

- (1) 961  
 (2) 931  
 (3) 930  
 (4) 900

( )

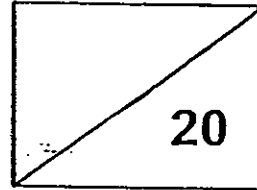
End of Booklet A

Pei Chun Public School  
Continual Assessment 1  
Mathematics  
Primary 6

**Paper 1 (Booklet B)**  
You are not allowed to use a calculator.

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

Marks :



Class : Primary 6

Date : \_\_\_\_\_

Total Time for Booklets A and B: 50 min

Maths Teacher : \_\_\_\_\_

Parent's Signature : \_\_\_\_\_

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 )

Do not write  
in this space

16. List down all the common multiples of 6 and 8 that are smaller than 50.

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

17. Fill in the missing number in the box.

$$3.285 = 3 + 0.2 + \boxed{\phantom{000}} + 0.005$$

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

SCORE





18. The table below shows the parking charges at a car park.

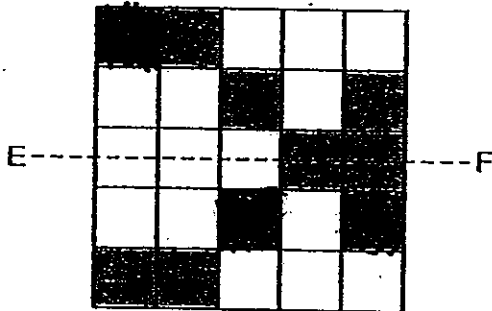
Parking Charges	
7 a.m. to 5 p.m.	\$3.50 per hour or part thereof

Ben parked his car from 1.20 p.m. to 4.35 p.m. How much parking fee did he pay?

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

Do not write  
in this space

19. Shade three more squares to complete the figure below so that the dotted line EF is the line of symmetry.



20. A movie lasting 2 hours and 32 minutes ended at 13 50. At what time did the movie start? Give your answer in 24-hour time.

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

21. Arrange the following fractions from the smallest to the largest.

SCORE

22. Find the value of  $0.08 \times 90$ .

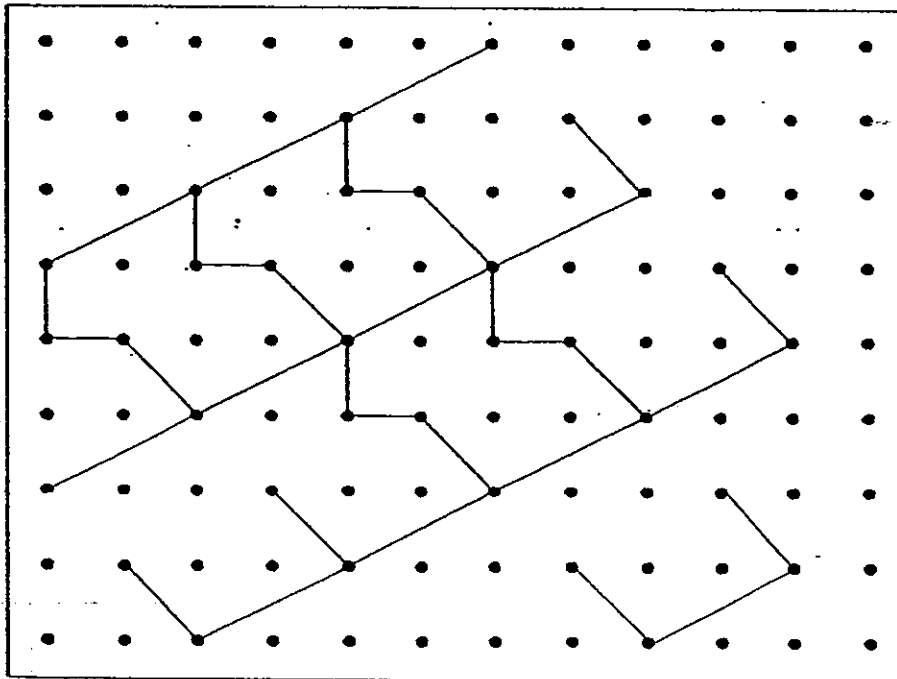
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in this space

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

23. Find the value of  $10.02 - 8.3$ .

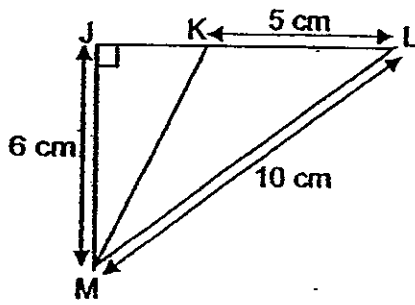
Ans : \_\_\_\_\_

24. The pattern in the box below shows part of a tessellation. Extend the tessellation by drawing three more unit shapes in the space provided within the box.



SCORE

25. In the figure below, JKL is a straight line. Find the area of triangle KLM.



Do not write  
in this space

Ans : \_\_\_\_\_ cm<sup>2</sup>

Questions 26 to 30 carry 2 marks each. Show your working 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. ( 10 marks )

26. Ada's mass is  $3c$  kg. Sam is 2 kg lighter than Ada. Zack is 5 kg heavier than Ada. If  $c = 9$ , what is the total mass of Ada, Sam and Zack in kg?

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

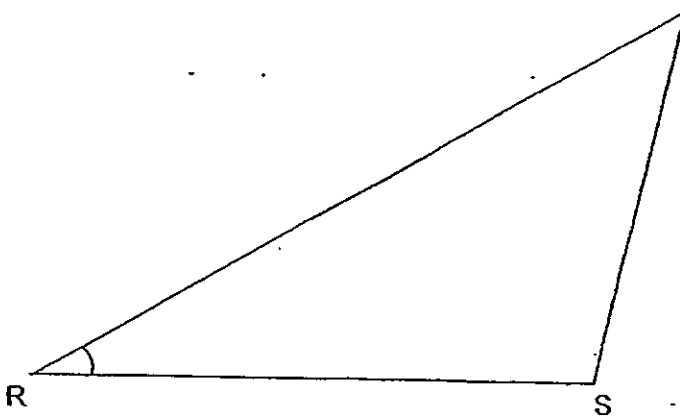
SCORE

27. Nat has 12 erasers and Yani has some erasers. If Yani gives Nat 5 erasers, the number of erasers Yani has will decrease by 20%. How many erasers do they have altogether?

Do not write  
in this space

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

28. Draw and label a triangle PRS in which  $PR = 10$  cm and  $\angle PRS = 30^\circ$ . The line RS has been drawn for you.



SCORE

29. Mr Huat went to a bakery to buy some muffins. The price of one muffin was \$0.80. For every 7 muffins Mr Huat bought, he could buy another one at half the price. What was the greatest number of muffins that Mr Huat could buy with \$21?

Do not write  
in this space

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

30. There were some books in a box. Farris took 25% of the books and another 5 more books. After Indra took 50% of the remaining books and another 3 more books, there were 8 books left in the box. How many books were there in the box at first?

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

End of Booklet B

SCORE



Pei Chun Public School  
Continual Assessment 1 – 2012  
Mathematics  
Primary 6

**Paper 2**  
You are allowed to use a calculator.

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

Marks :

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

Date : 28 February 2012

Time : 1 h 40 min

Maths Teacher : \_\_\_\_\_

Parent's Signature : \_\_\_\_\_

<b>Paper 1 (Booklet A)</b>	/	<b>20</b>
<b>Paper 1 (Booklet B)</b>	/	<b>20</b>
<b>Paper 2</b>	/	<b>40</b>
<b>Booklet K Qn 5, Qn 14 – Qn 18</b>	/	<b>20</b>
<b>TOTAL</b>	/	<b>100</b>

Questions 1 to 4 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 require units, give your answers in the units stated. ( 8 marks )

1. Janet's father is 36 years older than Janet. 3 years ago, he was 4 times as old as Janet. How old will Janet be 6 years from now?

Do not write in this space

Ans : \_\_\_\_\_ years old

SCORE

2. Aizhen has \$107.40 more than Fiona. After Aizhen spent half of her money and Fiona spent \$51.40, they had an equal amount of money left. How much money did Fiona have at first?

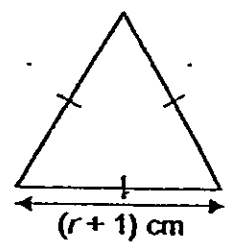
Do not write in this space

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

3. Identical 2-cm cubes are cut from a rectangular block of wood measuring 20 cm by 35 cm by 31 cm. What is the greatest number of such cubes that can be cut from the block of wood?

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

4. A piece of wire is bent into the shape of an equilateral triangle as shown in the figure below. The same wire is then bent into the shape of a square. Express the length of the square in terms of  $r$ .



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

5. Refer to Booklet K.

SCORE

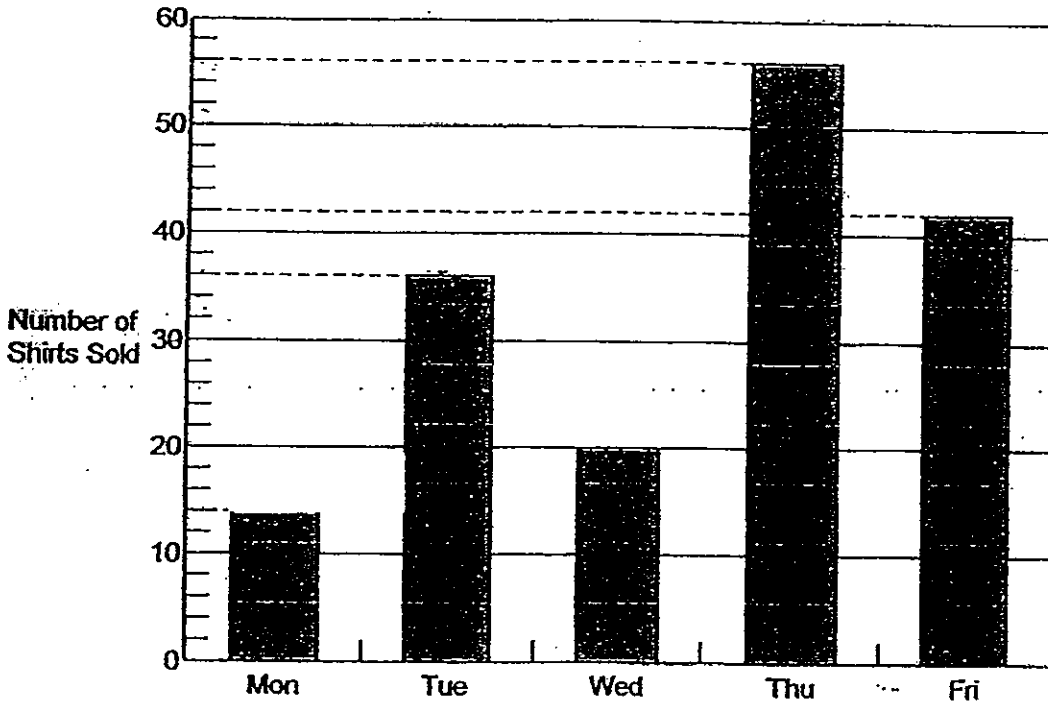
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For questions 6 to 13, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (Total: 32 marks)

Do not write in this space

6. The bar graph below shows the number of shirts sold by Mrs Quah from Monday to Friday.



- (a) On which day was the number of shirts sold a quarter of those sold on Thursday?
- (b) Find the ratio of the number of shirts sold on Friday to the number of shirts sold on Tuesday. Give your answer in the simplest form.
- (c) Express the number of shirts sold on Wednesday as a percentage of the total number of shirts sold from Monday to Friday. Give your answer to the nearest 1%.

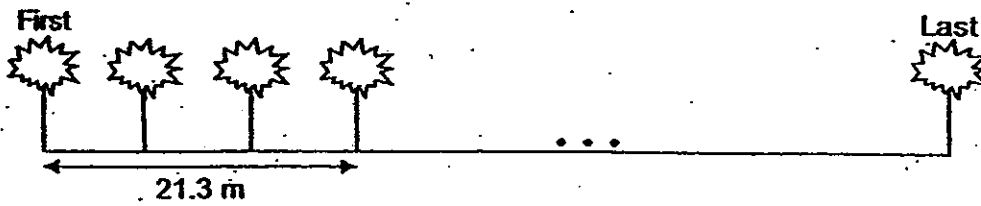
Ans : (a) \_\_\_\_\_ [1]

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

(c) \_\_\_\_\_ [2]

SCORE

7. Farmer Ho planted 20 apple trees in a row at equal distance apart. The distance between the first and the fourth tree was 21.3 m.



Do not write  
in this space

- (a) Find the distance between the first and the last tree.
- (b) Farmer Ho wants to plant another 25 trees at equal distance apart using the same total distance as in (a). How far apart will each tree be from the next? (Give your answer correct to 1 decimal place.)

Ans : (a) \_\_\_\_\_ [2]

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

SCORE

8. For every 250 books Sharon sells, she earns \$10. She receives an addition of \$30 for every 5000 books sold. How many books must she sell to earn \$1620?

Do not write  
in this space

Ans : \_\_\_\_\_ [3]

SCORE

9. Helen and Muthu had some stickers. The number of stickers Helen had was 64% of what Muthu had. Helen then gave Muthu  $\frac{1}{4}$  of her stickers. As a result, Muthu had 119 more stickers than Helen.

Do not write  
in this space

- (a) How many stickers did Helen have at first?  
(b) How many stickers did Muthu have in the end?

Ans : (a) \_\_\_\_\_ [4]

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

SCORE

10. Mrs Song has some money to buy apples and pears. If she buys 5 apples and 2 pears, she will have \$2.05 left. If she buys 2 apples and 7 pears instead, she will need another \$2.30. If an apple costs \$0.55, how much money does Mrs Song have?

Do not write  
in this space

Ans : \_\_\_\_\_ [3]

SCORE

11. At first, there were 18 boys and 126 girls at the school hall. There were also some pupils at the canteen. The ratio of the number of boys to the number of girls at the canteen was 1 : 2. After all the pupils at the canteen went to the school hall, the ratio of the number of boys to the number of girls at the school hall became 1 : 4.

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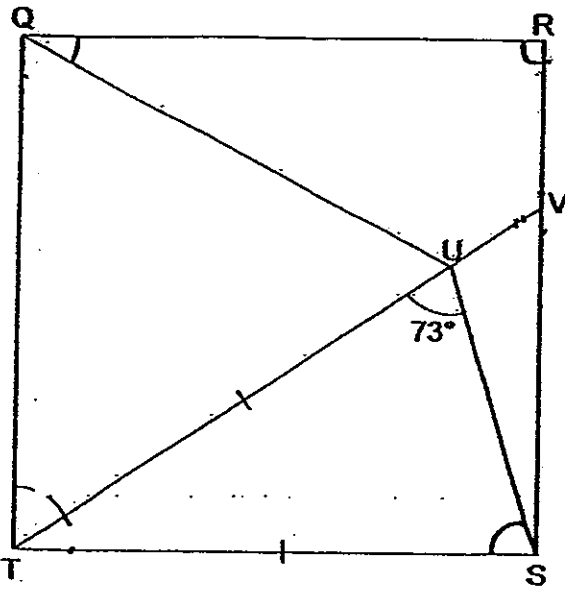
How many boys were there at the canteen at first?

Ans : \_\_\_\_\_ [3]

SCORE

12. In the figure below, QRST is a square. TUV is a straight line. ST = TU and  $\angle SUT = 73^\circ$ .

Do not write  
in this space



- (a) Find  $\angle QTU$ .  
(b) Find  $\angle UQR$ .

Ans : (a) \_\_\_\_\_ [2]

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

SCORE

Do not write  
in this space

13. At first, there were a total of 1540 blue and red beads in a jar. After  $\frac{2}{7}$  of the blue beads and  $\frac{3}{5}$  of the red beads were removed from the jar, the ratio of the number of blue beads left in the jar to the number of red beads left in the jar became 5 : 6.

- (a) How many red beads were there in the jar at first?
- (b) How many more blue beads must be added to the jar so that the number of blue beads in the jar becomes 58%?

Ans : (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [2]

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For Questions 14 to 18, refer to Booklet K.

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End of this Booklet

Set by : Mr Terence Ong

SCORE



Pei Chun Public School  
Continual Assessment 1, 2012  
Primary 6, Mathematics  
Paper 1, Booklet A & B

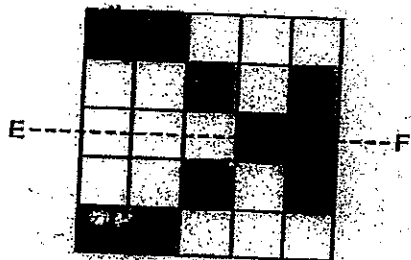
1)	2	4)	4	7)	4	10)	1	13)	3
2)	4	5)	1	8)	2	11)	2	14)	4
3)	3	6)	3	9)	2	12)	1	15)	3

16) 24, 48

17) 0.08

18) \$14

19)



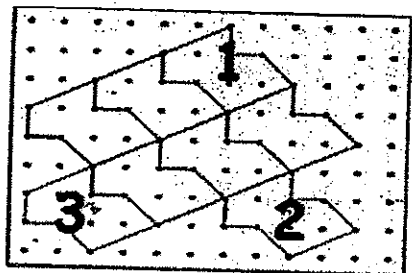
20) 118

21)  $\frac{5}{9}$ ,  $\frac{3}{4}$ ,  $\frac{4}{5}$

22) 7.2

23) 1.72

24)



25)  $\frac{1}{2} \times 5 \times 6 = 15$

26) Ada = 3c = 3 x 9kg = 27

Sam = 27 - 2 = 25

Zack = 27 + 5 = 32

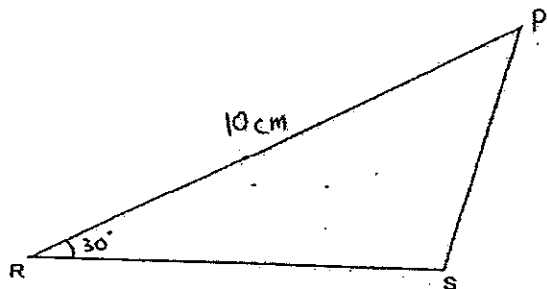
Total = 27 + 25 + 32 = 84

7) 20% = 5

Yani = 5 x 5 = 25

Total = 25 + 12 = 37

8)



1) 7 muffins =  $\$0.80 \times 7 = \$5.60$   
8 muffins =  $\$5.60 + \$0.40 = \$6$   
Muffins bought =  $3 \times 8 + 3 = 27$

Muffins sold at half price =  $\$0.80 \div 2 = \$0.40$   
Group of muffins =  $21 \div 6 = 3 \text{ r } 3$

2) 50% of remainder =  $8 + 3 = 11$   
75% of the box =  $22 + 5 = 27$   
No. of books initially =  $9 \times 4 = 36$

Remainder =  $11 \times 2 = 22$   
25% =  $27 \div 3 = 9$

Paper 2

3 units = 36                      1 unit =  $36 \div 3 = 12$                       Now =  $12 + 3 = 15$   
 6 years later =  $15 + 6 = \underline{21}$

1 unit =  $\$107.40 + \$51.40 = \$158.80$   
 Amount of money Fiona have at first =  $\$158.80 + \$51.40 = \underline{\$210.20}$

$20 \div 2 = 10$                        $35 \div 2 = 17 \text{ r}1$                        $31 \div 2 = 15 \text{ r}1$   
 Greatest number =  $10 \times 17 \times 15 = \underline{2550}$

Length of wire =  $(r+1) + (r+1) + (r+1) = 3r + 3$                       Length of square =  $\left(\frac{3r+3}{4}\right)$

i) Monday                      6b)  $42 : 36 = \underline{7 : 6}$                       6c)  $\frac{20}{14 + 36 + 20 + 56 + 42} \times 100\% \approx \underline{12\%}$

Helen = 64% of Muthu  
 Muthu after =  $100\% + 16\% = 116\%$   
 Difference =  $116\% - 48\% = 68\%$   
 $68\% = 119$   
 $64\% = \frac{119}{68} \times 64 = \underline{112}$   
 $116\% = \frac{119}{68} \times 116 = \underline{203}$

Helen gave =  $\frac{1}{4} \times 64\% = 16\%$   
 Helen after =  $64\% - 16\% = 48\%$

7) a) 134.9M  
 b) 5.6M

- a) Helen had 112 stickers at first.  
 b) Muthu has 203 stickers in the end.

8) 35250 Books

5 pears =  $\$2.05 + \$2.30 + (3 \times \$0.55) = \$6$                       1 pear =  $\$6 \div 5 = \$1.20$   
 2 pears and 5 apples =  $(\$1.20 \times 2) + (\$0.55 \times 5) = \$5.15$   
 Money Mrs song had =  $\$5.15 + \$2.05 = \underline{\$7.20}$

	Boys : Girls		School Hall	
+1	18 : 12	+2	Canteen	4 parts + 72 = 2 parts + 126
	1 : 4			4 parts - 2 parts = 126 - 72
	4 : 2			2 parts = 54
+72		+126		1 part = $54 \div 2 = \underline{27}$
	4 : 4			

There were 27 boys at the canteen at first.

i)  $\angle UTS = 180^\circ - 73^\circ - 73^\circ = 34^\circ$   
 ii)  $\angle TQU = (180^\circ - 56^\circ) \div 2 = 62^\circ$

$\angle QTU = 90^\circ - 34^\circ = \underline{56^\circ}$   
 $\angle UQR = 90^\circ - 62^\circ = \underline{28^\circ}$

i) Total units =  $15 + 7 = 22$                        $\frac{1540}{22}$   
 No. of red beads at first =  $\frac{22}{15} = \underline{1050}$

ii) % of Red beads at end =  $\frac{420}{42} = 10\%$   
 Blue beads at end =  $\frac{42}{1540} \times 58 = 580$

Red beads at end =  $\frac{1540}{42} \times 6 = 420$

Initial no. of blue beads =  $\frac{22}{5} = 350$

No. of blue beads to be added =  $580 - 350 = \underline{230}$