



PEI CHUN PUBLIC SCHOOL  
SEMESTRAL ASSESSMENT 2, 2017

MATHEMATICS  
PRIMARY 5

PAPER 1  
(BOOKLET A)

Additional materials: Optical Answer Sheet (OAS)

Total Time For Booklets A & B : 1 h

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

Class : Primary 5 \_\_\_\_

Date : 27 October 2017

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

**INSTRUCTIONS TO CANDIDATES**

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL THE QUESTIONS.

SHADE YOUR ANSWERS IN THE OPTICAL ANSWER SHEET (OAS) PROVIDED.

YOU ARE NOT ALLOWED TO USE A CALCULATOR.

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)

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1. In 6 234 105, which digit is in the hundred thousands place?

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

2. Round 809 653 to the nearest thousand.

- (1) 800 000
- (2) 809 600
- (3) 809 700
- (4) 810 000

3. Which of the following has 6 as a factor?

- (1) 18
- (2) 16
- (3) 3
- (4) 4

4.  $2 \text{ tenths} + 8 \text{ hundredths} + 6 \text{ thousandths} =$ 

?
---

What is the missing number in the box?

- (1) 0.286
- (2) 2.086
- (3) 2.806
- (4) 28.6

5. Express  $13 \div 5$  as a mixed number in its simplest form.

(1)  $\frac{13}{5}$

(2)  $1\frac{3}{5}$

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

(4)  $3\frac{2}{5}$

6. Express  $6\frac{1}{20}$  as a decimal.

(1) 6.1

(2) 6.12

(3) 6.05

(4) 6.5

7. Express  $\frac{1}{4}$  hour in minutes.

(1) 4 min

(2) 15 min

(3) 25 min

(4) 40 min

8.  $4 : 5 = \boxed{\quad ? \quad}$

What is the missing ratio in the box?

(1) 8 : 10

(2) 8 : 15

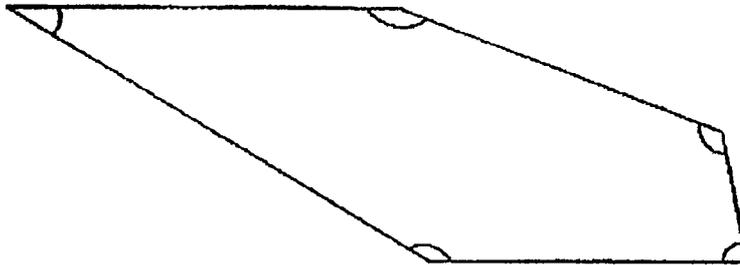
(3) 12 : 10

(4) 24 : 25

9. Express  $\frac{3}{5}$  as a percentage.

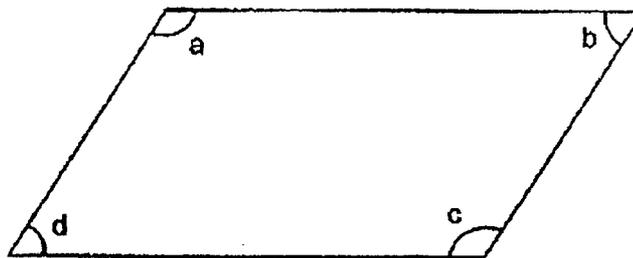
- (1) 3 %
- (2) 6 %
- (3) 30 %
- (4) 60 %

10. Five angles are marked in the figure below. How many of them are obtuse angles?



- (1) 5
- (2) 2
- (3) 3
- (4) 4

11. The figure below shows a parallelogram.



Which statement about the parallelogram is true?

- (1)  $\angle a = \angle d$
- (2)  $\angle a = \angle b$
- (3)  $\angle c + \angle d = 180^\circ$
- (4)  $\angle b + \angle d = 180^\circ$

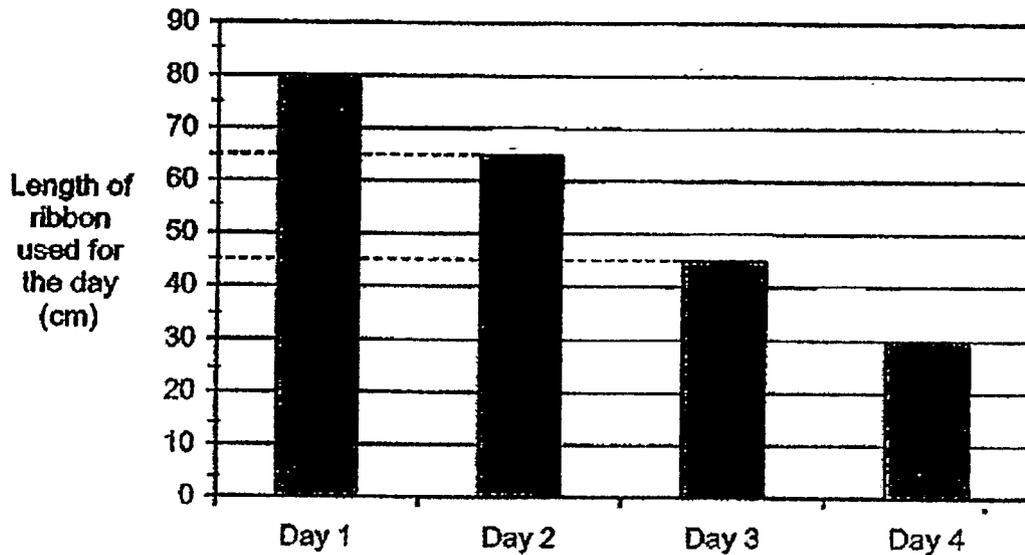
12. Latif had twice as many marbles as Mohan. After Latif bought another 45 marbles, he had 5 times as many marbles as Mohan. How many marbles did Latif have at first?

- (1) 9
- (2) 15
- (3) 18
- (4) 30

13. Brian spent  $\frac{5}{8}$  of his money on a book and  $\frac{1}{8}$  of the remainder on a pen. What fraction of his money had he left?

- (1)  $\frac{1}{16}$
- (2)  $\frac{5}{16}$
- (3)  $\frac{11}{24}$
- (4)  $\frac{5}{48}$

14. Laura had a roll of ribbon. She used some of it for 4 days. At the end of each day, she measured and recorded the length of the ribbon she used for the day. The bar graph below shows her records.



Given that the length of the ribbon left at the end of Day 4 was 200 cm, what was the length of the ribbon Laura had at first?

- (1) 420 cm
  - (2) 390 cm
  - (3) 230 cm
  - (4) 220 cm
15. Aisha had some beads at first. She put all the beads equally into 3 boxes. After using 75 beads to make a bracelet and giving one box of beads to her sister, Aisha had 315 beads left. How many beads did Aisha have at first?
- (1) 390
  - (2) 585
  - (3) 720
  - (4) 780



PEI CHUN PUBLIC SCHOOL

SEMESTRAL ASSESSMENT 2, 2017

MATHEMATICS

PRIMARY 5

PAPER 1

(BOOKLET B)

Total Time For Booklets A & B : 1 h

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

Class : Primary 5 \_\_\_\_

Date : 27 October 2017

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

**INSTRUCTIONS TO CANDIDATES**

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ANSWER ALL QUESTIONS.

SHOW YOUR WORKING CLEARLY AS MARKS ARE AWARDED FOR CORRECT WORKING.

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Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

Do not write  
in this space

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16. What is the value of  $40 \div 2000$ ? Express your answer as a decimal.

Answer : \_\_\_\_\_

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17. Find the value of  $48 - (15 + 9) \div 6$ .

Answer : \_\_\_\_\_

---

18. Find the value of  $\frac{5}{12} - \frac{1}{8}$ . Give your answer in the simplest form.

Answer : \_\_\_\_\_

SCORE

19. Find the value of  $9.24 \times 7$ .

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Answer: \_\_\_\_\_

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20. Arrange the following from the greatest to the smallest.

6.04 , 6.041 , 6.401 , 6.4

Answer: \_\_\_\_\_

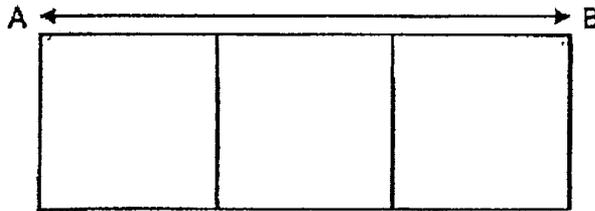
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SCORE

Questions 21 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

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21. The figure below is made up of 3 identical squares. The perimeter of the whole figure is 116 cm.



Find the length of AB.

Answer : \_\_\_\_\_ cm

22. There are some apples in a crate. The ratio of the number of red apples to the number of green apples is 6 : 7. There are 84 green apples. How many red apples are there?

Answer : \_\_\_\_\_

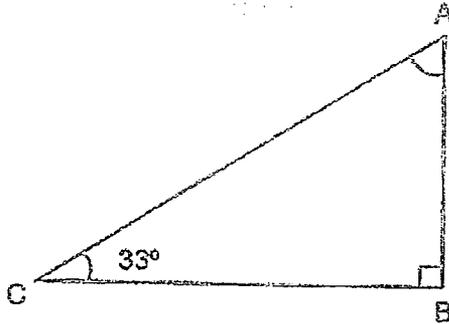
SCORE

23. A machine produces 320 toys in 5 minutes. At this rate, how many such toys can the machine produce in 22 minutes?

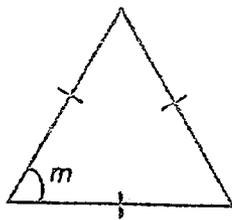
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Answer : \_\_\_\_\_

24. (a) In triangle ABC,  $\angle ABC$  is a right angle and  $\angle ACB = 33^\circ$ . Find  $\angle CAB$ .



- (b) The triangle below is an equilateral triangle. Find  $\angle m$ .



Answer : (a) \_\_\_\_\_<sup>o</sup>

(b) \_\_\_\_\_<sup>o</sup>

SCORE

25. Using the given line HF below, draw a triangle GHF such that GH is 4 cm and  $\angle GHF$  is  $50^\circ$ .

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write in



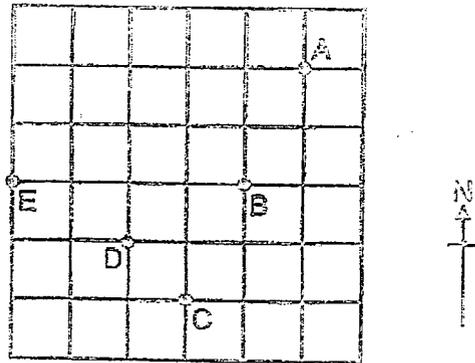
26. Colin put \$2800 in a savings account that earned 2% interest per year. How much money did Colin have in his savings account at the end of 1 year?

Answer: \$ \_\_\_\_\_

SCORE

27. Refer to the square grid below and fill in the blanks with A, B, C, D or E.

Do not write  
in this space



(a) Point \_\_\_\_\_ is west of point \_\_\_\_\_

(b) Point \_\_\_\_\_ is north-east of point \_\_\_\_\_

28. The table below shows the programme guide for a children TV channel.

Time	Programme
10 30	Power Rangers (cartoon)
11 15	Sea Creatures (documentary)
12 40	Superheroes (movie)
14 35	Pokemon (cartoon)

- (a) Randy switched on the TV to watch the children channel at 2 p.m.  
What programme was being shown then?
- (b) How long was the documentary, Sea Creatures?  
Give your answer in h and min.

Answer : (a) \_\_\_\_\_

(b) \_\_\_\_\_ h \_\_\_\_\_ min

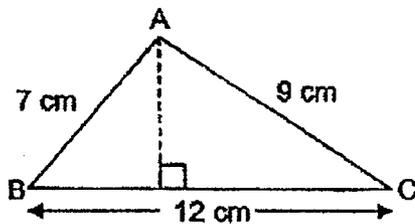
SCORE

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29. Dylan and Ethan had \$400 altogether at first. Then, Dylan spent  $\frac{3}{5}$  of his money and Ethan spent all his money. They spent \$280 in all. How much money did Dylan spend?

Answer : \$ \_\_\_\_\_

30. Look at triangle ABC below.



Based on the information above, put a tick in the correct box.

	True	False	Not possible to tell
(a) The area of triangle ABC is $54 \text{ cm}^2$ .			
(b) When the height and base of the triangle ABC is doubled, the area of the new triangle is also doubled.			

End of Paper

SCORE

PEI CHUN PUBLIC SCHOOL

SEMESTRAL ASSESSMENT 2, 2017

MATHEMATICS

PRIMARY 5

PAPER 2

Time: 1 h 30 min

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

Class : Primary 5 \_\_\_\_\_

Date : 27 October 2017

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

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

Paper 1 (Booklet A)	20
Paper 1 (Booklet B)	25
Paper 2	55
<b>TOTAL</b>	<b>100</b>

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Questions 1 to 5 carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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Do not write  
in this space

1. Ali had 120 balloons. He gave away  $\frac{2}{5}$  of the balloons. How many balloons had Ali left?

Answer : \_\_\_\_\_

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2. The mass of a bottle of lotion is 60 g. What is the mass of 380 such bottles of lotion? Express your answer in kilograms.

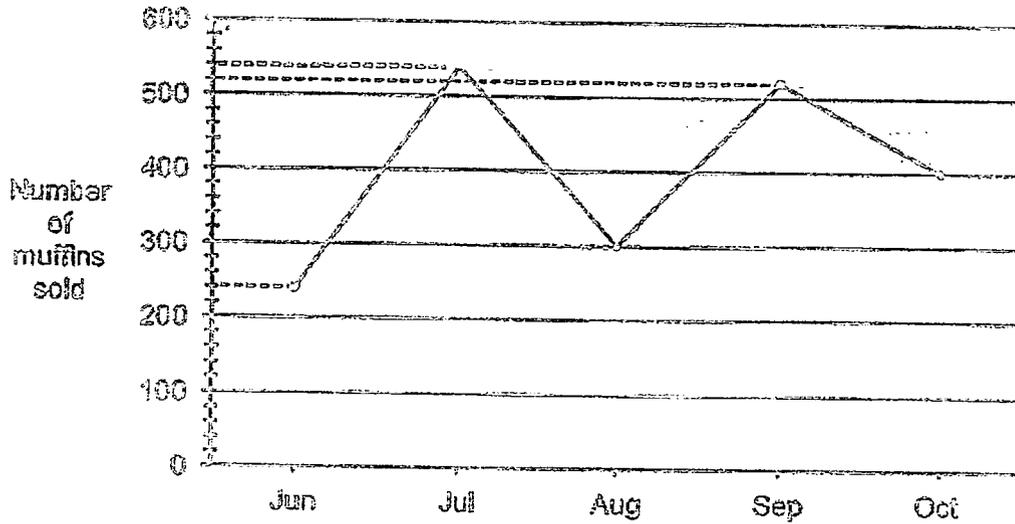
Answer : \_\_\_\_\_ kg

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SCORE

3. The line graph below shows the number of muffins sold each month by a bakery from June to October.

Do not write  
in this space



What was the total number of muffins sold by the bakery from June to October?

Answer : \_\_\_\_\_

4. Rosa has 4 times as much money as Ben. They have \$180 altogether. How much does Rosa have to give to Ben so that both of them have the same amount of money?

Answer : \$ \_\_\_\_\_

SCORE

5. 1 kg of grapes cost \$10.80 and 1 kg of cherries cost twice as much. Mrs Sim bought  $2\frac{3}{4}$  kg of grapes and  $1\frac{2}{5}$  kg of cherries. How much did Mrs Sim spend altogether?

Do not write  
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Answer : \$ \_\_\_\_\_

SCORE

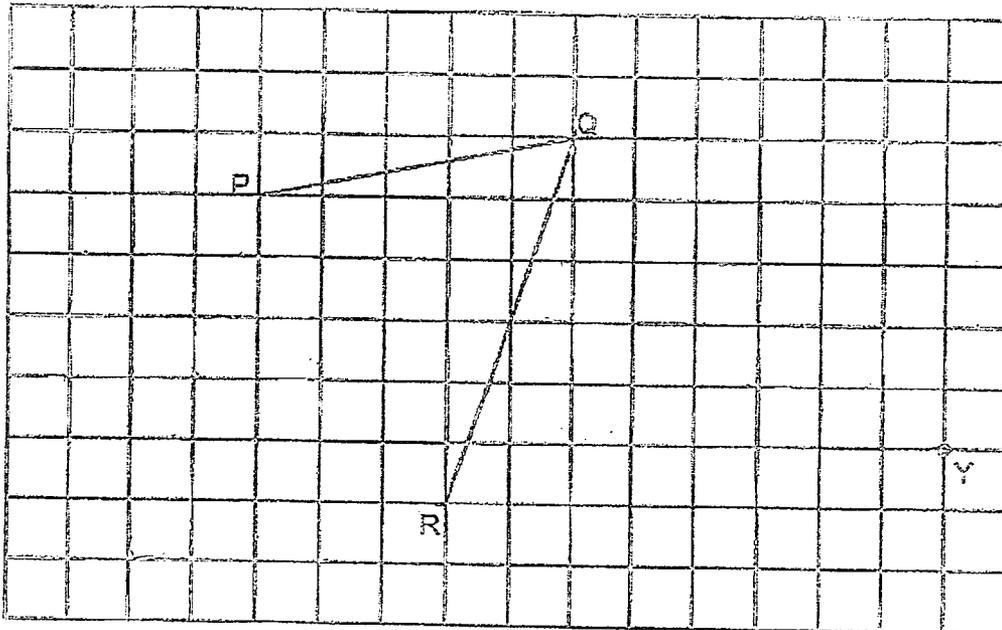
For questions 6 to 17, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

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6. In the square grid, two sides of a parallelogram PQRS have been drawn.

(a) Complete the drawing of the parallelogram PQRS. [2]

(b) Draw a perpendicular line from point Y to QR. [1]



SCORE

7. In January, 60% of a reading club of 125 members were girls and the rest were boys. In May, 20 more girls joined the club.

Do not write  
in this space

- (a) In January, how many of the members were girls?
- (b) What percentage of the members in May were girls? Round your answer to the nearest percent.

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

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

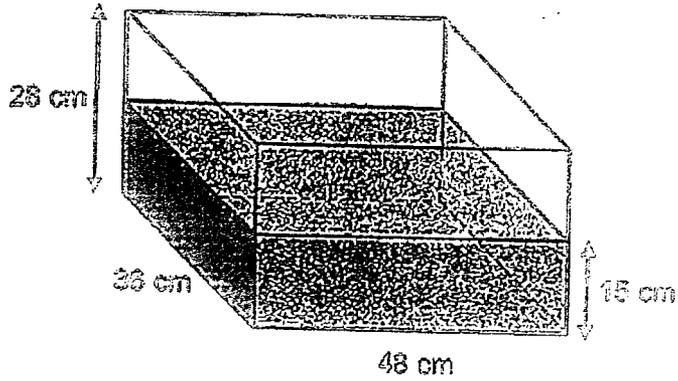
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SCORE

8.

A rectangular tank measuring 48 cm by 36 cm by 28 cm contained water to a depth of 15 cm. Another 6 l 800 ml of water was poured into the container. How much more water was needed to fill the tank to the brim? Give your answer in litres and millilitres.

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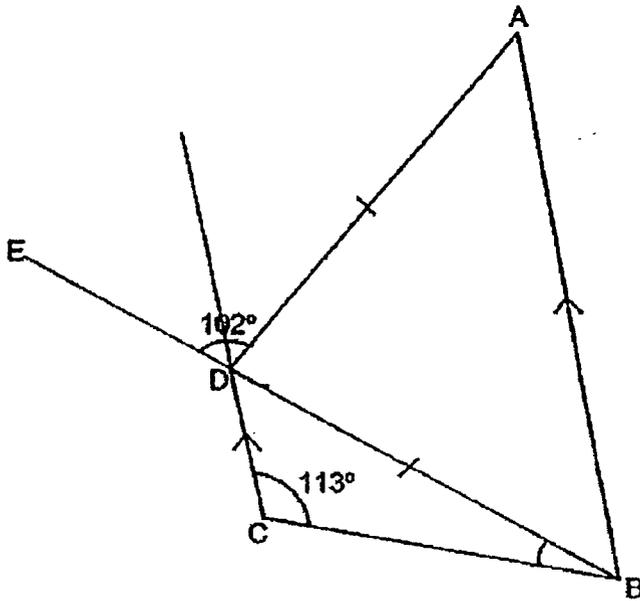


Answer : \_\_\_\_\_ [3]

SCORE

9. ABCD is a trapezium. BDE is a straight line and  $DA = DB$ .  $\angle ADE = 102^\circ$  and  $\angle BCD = 113^\circ$ .

Do not write  
in this space



- (a) Find  $\angle BAD$ .  
(b) Find  $\angle CBD$ .

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

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

SCORE

10. The table below shows the number of television sets a shop sold from Monday to Friday. The data for Wednesday and Friday had not been recorded.

Do not write  
in this space

Day	Mon	Tue	Wed	Thu	Fri
Number of television sets sold	24	35		21	

The average number of television sets sold by the shop over the 5 days was 28. The shop sold twice as many television sets on Friday as on Wednesday. How many television sets did the shop sell on Wednesday?

Answer : \_\_\_\_\_ [3]

SCORE

Do not write  
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11. The table below shows the rates of charges for water usage.

Volume of water used	Charge
First 40 m <sup>3</sup>	\$1.15 per m <sup>3</sup>
Additional amount above 40 m <sup>3</sup>	\$1.45 per m <sup>3</sup>

- (a) The Tan family used 46 m<sup>3</sup> of water in January. How much did the Tan family pay for the water used in January?
- (b) The Koh family paid \$73.55 for the water used in February. How much water did the Koh family use in February?

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

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

SCORE

12. 2.9 kg of sugar is mixed with 4.65 kg of cocoa powder. The mixture is then packed into packets of 35 g each.

Do not write  
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- (a) How many 35-g packets are there?
- (b) How many grams of the mixture are left over?

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

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

SCORE

13. Mrs Jalil sold doughnuts in boxes of 10 for \$17 each and cupcakes in boxes of 8 for \$14 each. She sold an equal number of boxes of doughnuts and cupcakes. She sold 152 cupcakes.

Do not write  
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- (a) How many doughnuts did Mrs Jalil sell?
- (b) What was the total amount of money that Mrs Jalil collected from selling the doughnuts and cupcakes?

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

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

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SCORE

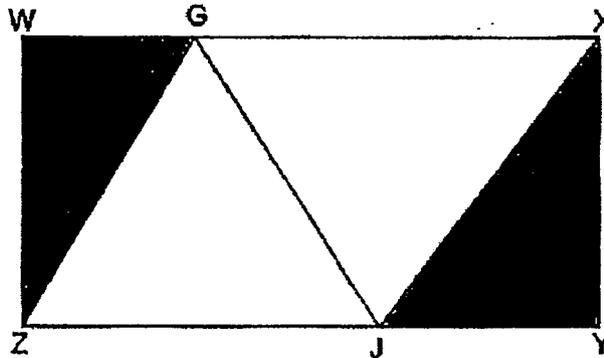
14. At first, Leon had \$225 and Mike had \$297. They bought a gift for their friend and shared the cost equally. The ratio of the amount of money Leon had left to the amount of money Mike had left became 5 : 9. How much did the gift cost?

Do not write  
in this space

Answer : \_\_\_\_\_ [4]

SCORE

15. In the figure below,  $WXYZ$  is a rectangle. The area of triangle  $WGZ$  is  $\frac{1}{6}$  the area of rectangle  $WXYZ$ . The area of triangle  $XYJ$  is  $\frac{3}{16}$  the area of rectangle  $WXYZ$ . The total area of the shaded parts is  $408 \text{ cm}^2$ .



- (a) What is the area of rectangle  $WXYZ$ ?
- (b) What is the area of triangle  $GJX$ ?

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

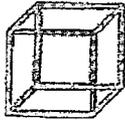
(b) \_\_\_\_\_ [2]

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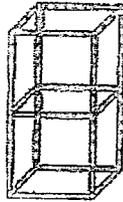
SCORE

16. Identical rods are used to form some structures. The first three structures are shown below.

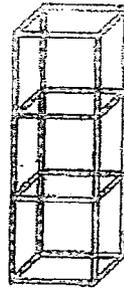
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Structure 1



Structure 2



Structure 3

The table below shows the number of rods used for each structure.

Structure Number	Number of cubes	Number of rods used
1	1	12
2	2	20
3	3	28

- (a) How many rods are needed to form structure 24?
- (b) Find the number of cubes that can be formed with 428 rods.

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

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

SCORE

17. Ken spent  $\frac{1}{4}$  of his money on 15 calculators and 31 pens. The cost of a calculator was 3 times the cost of a pen. He bought some more calculators with  $\frac{3}{4}$  of his remaining money. How many calculators did Ken buy altogether?

Do not write  
in this space

Answer : \_\_\_\_\_ [5]

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**End of Paper**

Set by : Mrs Tan Kwal Sin, Mrs Soh Bee Lian and Mr Stanley Soh

SCORE

SCHOOL : PEI CHUN PUBLIC SCHOOL

LEVEL : PRIMARY 5

SUBJECT : MATH

TERM : 2017 SA2

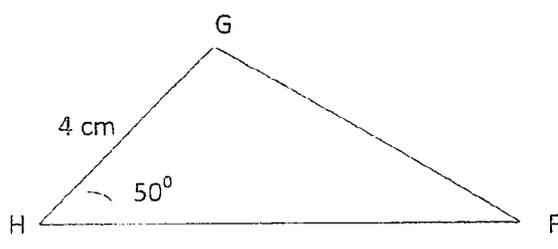
CONTACT :

**PAPER 1 BOOKLET A**

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	4	1	1	3	3	2	1	4	3

Q 11	Q12	Q13	Q14	Q15
3	4	2	1	2

**PAPER 1 BOOKLET B**

Q16)	0.02
Q17)	44
Q18)	$7 \div 24$
Q19)	57.68
Q20)	6.401, 6.4, 6.041, 6.04
Q21)	1 slide $\rightarrow 116 \div 8 = 14.5$ 3 slides $\rightarrow 14.5 \times 3 = 43.5$
Q22)	R : G 6 : 7 72 : 84
Q23)	5 Minutes $\rightarrow 320$ 1 minute $\rightarrow 320 \div 5 = 64$ 22 minutes $\rightarrow 64 \times 22 = 1408$
Q24)	(a) Angle CAB $\rightarrow 180 - 90 - 33 = 57$ (b) angle M $\rightarrow 180 \div 3 = 60$
Q25)	

Q26)	$100\% \rightarrow 2800$ $1\% \rightarrow 800 \div 100 = 28$ $2\% \rightarrow 28 \times 2 = 56$ Amount of money $\rightarrow 2800 + 56 = 2856$
Q27)	(a) E, B (b) A, D
Q28)	(a) Superheroes(movie) (b) 1h 25min
Q29)	(a) $2 \text{ units} = 400 - 280$ $= 120$ $1 \text{ unit} = 120 \div 2$ $= 60$ $3 \text{ units} = 60 \times 3$ $= 180$
Q30)	(a) False (b) False

## PAPER 2

Q1)	$1 \text{ unit} \rightarrow 120 \div 5 = 24$ $3 \text{ units} \rightarrow 24 \times 3 = \underline{72}$
Q2)	$380 \text{ bottles} \rightarrow 380 \times 60 = 22800\text{g} = \underline{22.8\text{kg}}$
Q3)	Total $\rightarrow 240 + 540 + 300 + 520 + 400 = \underline{2000}$
Q4)	$1 \text{ unit} \rightarrow 180 \div 5 = 36$ $\frac{1}{2} \text{ unit} \rightarrow 36 \div 2 = 18$ Rosa gave $\rightarrow 36 + 18 = \underline{54}$
Q5)	$1\text{kg of cherries} \rightarrow \$10.80 \times 2 = \$21.60$ $\frac{1}{4} \text{ kg of grapes} \rightarrow \$10.80 \div 4 = \$2.70$ $2.75\text{kg of grapes} \rightarrow (\$10.80 \times 2) + (\$2.70 \times 3) = \$29.70$ $0.2\text{kg of cherries} \rightarrow \$21.60 \div 5 = \$4.32$ $1.4\text{kg of cherries} \rightarrow \$21.60 + (\$4.32 \times 2) = \$30.24$ Total $\rightarrow \$30.24 + \$29.70 = \underline{\$59.94}$
Q6)	
Q7)	(a) $1\% \rightarrow 125 \div 100 = 1.25$ $60\% \rightarrow 1.25 \times 60 = \underline{75}$ (b) $40\% \rightarrow 1.25 \times 40 = 50$ Total in May $\rightarrow 125 + 20 = 145$ $1\% \rightarrow 145 \div 100 = 1.45$ Girls in May $\rightarrow 75 + 20 = 95$ Percentage of girls $\rightarrow 95 \div 145 = 65.5 \approx \underline{66\%}$

Q8) Water needed to fill the tank  $\rightarrow 48 \times 36 \times (28 - 15) = 22464$   
Volume of water needed  $\rightarrow 22464 - 6800 = 15664 = \underline{15 \text{ litre } 64\text{ml}}$

Q9) (a) Angle ADB  $\rightarrow 180^\circ - 102^\circ = 78^\circ$   
Angle BAD  $\rightarrow (180^\circ - 78^\circ) \div 2 = 51^\circ$   
Angle CDB  $\rightarrow 180^\circ - 51^\circ - 78^\circ = \underline{51^\circ}$   
(b) Angle CBD  $\rightarrow 180^\circ - 51^\circ - 113^\circ = \underline{16^\circ}$

Q10) Total  $\rightarrow 28 \times 5 = 140$   
Total(mon+tues+wed)  $\rightarrow 24 + 35 + 21 = 80$   
Wed+fri  $\rightarrow 140 - 80 = 60$   
1 unit  $\rightarrow 60 \div 3 = \underline{20}$

Q11) (a) First  $40\text{m}^3 \rightarrow 1.15 \times 40 = 46$   
Extra  $6\text{m}^3 \rightarrow 1.45 \times 6 = 8.70$   
Total paid  $\rightarrow 46 + 8.70 = \underline{54.70}$   
(b) First  $40\text{m}^3 \rightarrow 73.55 - 46 = 27.55$   
Extra  $\text{m}^3 \rightarrow 27.55 \div 1.45 = 19$   
Total  $\rightarrow 19 + 40 = 59$  (Ans :  $59 \text{ m}^3$ )

Q12) (a)  $2.8 + 4.65 = 7.45 = 7450\text{g}$   
 $7450 \div 35 = 212 \text{ R } 30$  (Ans : 212)  
(b) 30c

Q13) (a) No. of boxes  $\rightarrow 152 \div 8 = 19$   
No. of donuts  $\rightarrow 19 \times 10 = \underline{190}$   
(b) Total  $\rightarrow (17 \times 7) + (19 \times 14) = 323 + 266 = \underline{589}$

Q14) Difference  $\rightarrow 297 - 155 = 72$   
L : M : D  
5 : 9 : 4  
90 : 162 : 72  
Amt each pay  $\rightarrow 225 - 90 = 135$   
Gift  $\rightarrow 135 \times 2 = 270$  (Ans: \$270)

Q15) (a)  $3/16 = 18/96$   
 $1/6 = 16/96$   
 $18/96 + 16/96 = 34/96 = 17/48$   
 $1/48 \rightarrow 408 \div 17 = 24$   
Area of rect WXYZ  $\rightarrow 24 \text{ cm} \times 48 \text{ cm} = \underline{1152 \text{ cm}^2}$   
(b) area (half rect)  $\rightarrow 48 \div 2 = 24$

$$24 - 8 = 16$$

$$\text{Area of GJX} \rightarrow 16\text{cm} \times 24\text{cm} = \underline{384\text{ cm}^2}$$

Q16) (a) No. of rods  $\rightarrow 12 + (12 \times 8) = \underline{196}$

(b)  $52 + 1 = \underline{53}$

Q17)  $\frac{1}{4}$  of money  $\rightarrow$  15 calculators

31 pens

$$\frac{1}{4} \text{ of money} \rightarrow (15 \times 3) + 31 = 76$$

$$\text{Fraction} \rightarrow \frac{3}{4} \times (1 - \frac{1}{4}) = \frac{3}{4} \times \frac{3}{4} = \frac{9}{16}$$

$$\frac{9}{16} \rightarrow \frac{76}{4} \times 9 = 171$$

$$171 \div 3 = 57$$

$$57 + 45 = \underline{72}$$