PEI CHUN PUBLIC SCHOOL

SEMESTRAL ASSESSMENT 1, 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 : 5 May 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 9 765 382, which digit is in the hundred thousands place?

    (1) 5

    (2) 6

    (3) 3

    (4) 7

2. What is the value of 800 × 50?

    (1) 4000

    (2) 40 000

    (3) 400 000

    (4) 4 000 000

3. Which of the following has the same value as $\frac{3}{25}$?

    (1) 0.12

    (2) 0.15

    (3) 0.25

    (4) 0.3

4. Which of the following is correct?

(1) $\dfrac{2}{5} = \dfrac{5}{15}$

(2) $\dfrac{3}{5} = \dfrac{18}{30}$

(3) $\dfrac{6}{7} = \dfrac{42}{56}$

(4) $\dfrac{8}{12} = \dfrac{32}{36}$

5. Which of the following angles is smaller than a right angle?
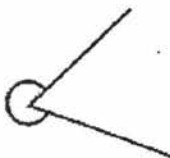
(1)

(2)

(3)

(4)

6. Arrange the following numbers from the largest to the smallest.

   8, 8.1, 8.01

   (1) 8 , 8.01 , 8.1

   (2) 8.01 , 8.1 , 8

   (3) 8.1 , 8 , 8.01

   (4) 8.1 , 8.01 , 8

7. What is the place value of digit 5 in 24,159?

   (1) tens

   (2) tenths

   (3) hundreds

   (4) hundredths
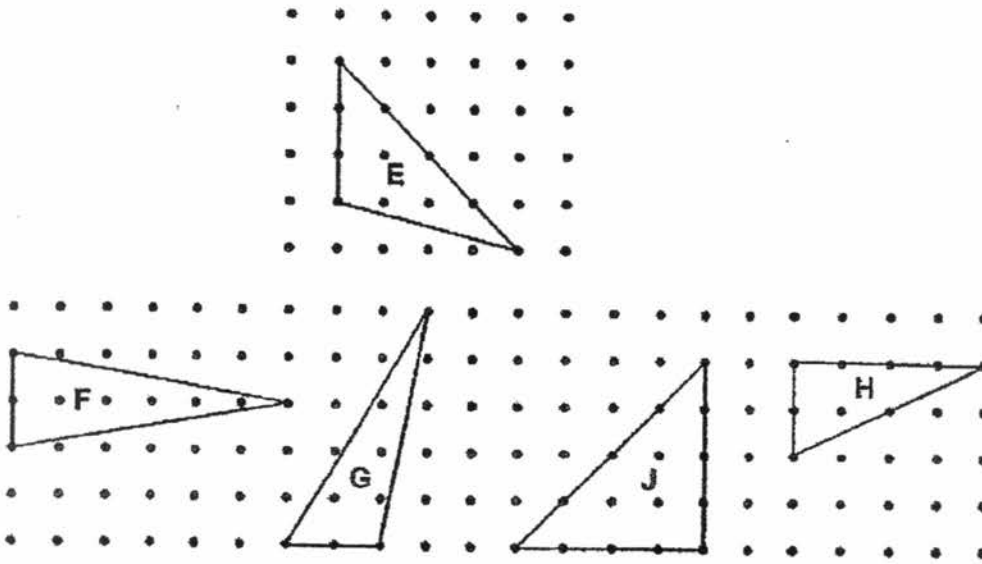

8. Express 0.06 as a fraction.

   (1) $\dfrac{6}{10}$

   (2) $\dfrac{6}{100}$

   (3) $\dfrac{6}{1000}$

   (4) $\dfrac{60}{100}$

9. There are five triangles shown on the square grid below.

Which of the following triangles has the same area as Triangle E?

(1) Triangle F

(2) Triangle G

(3) Triangle H

(4) Triangle J

10. A movie started at 19 30. It lasted 125 min. At what time did the movie end?

(1) 17 25

(2) 18 05

(3) 21 35

(4) 21 55

11. The table below shows the mass of 3 objects.

Objects	Mass
W	12 kg
X	72 kg
Y	42 kg

What is the ratio of the mass of Object W to the mass of Object X to the mass of Object Y in its simplest form?

(1) $2 : 12 : 7$

(2) $2 : 7 : 12$

(3) $4 : 24 : 14$

(4) $6 : 36 : 21$

12. Which of the following is closest to 1?

(1) $\dfrac{9}{8}$

(2) $\dfrac{8}{9}$

(3) $\dfrac{7}{6}$

(4) $\dfrac{6}{7}$

13. The lengths of the sides of a triangle are in the ratio 3 : 5 : 6. The length of the longest side is 30 cm. What is the perimeter of the triangle?

    (1)   5 cm

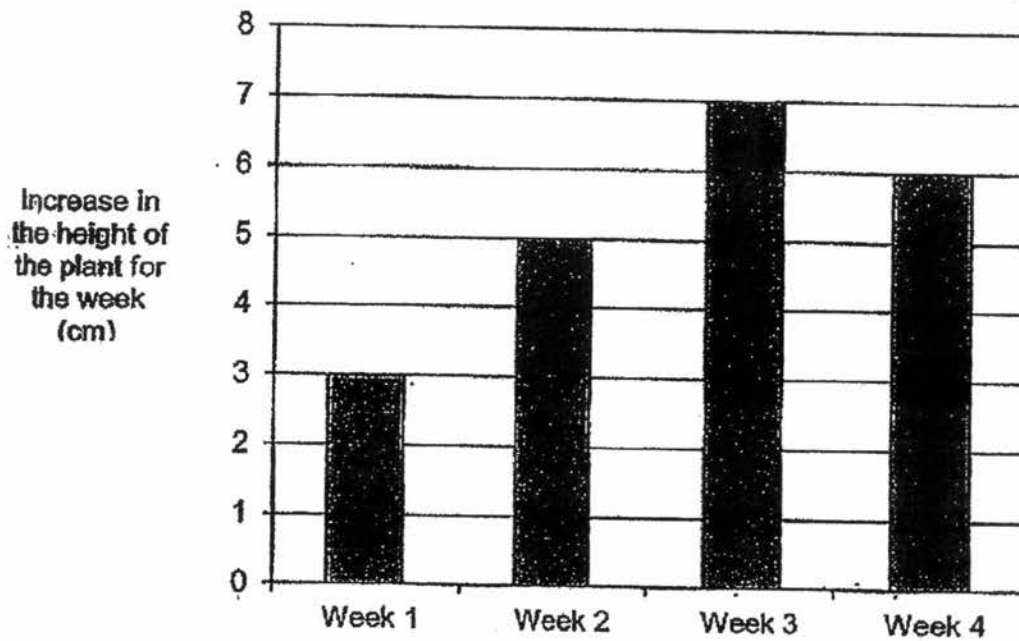   (2)   10 cm

    (3)   70 cm

    (4)   140 cm

14. In the square grid below, James was standing on Point P facing south-east.
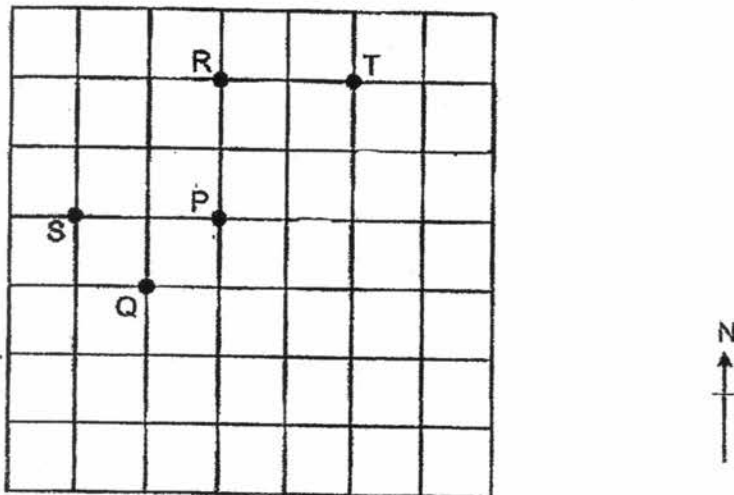
Then James turned 135° clockwise. Which point is he facing now?

    (1)   Q

    (2)   R

    (3)   S

    (4)   T

15. Jack bought a plant that was 12 cm tall. At the end of each week, he measured the height of the plant and recorded its increase for the week. The bar graph below shows his records.

What was the height of the plant when it was measured at the end of Week 3?

(1) 7 cm

(2) 15 cm

(3) 19 cm

(4) 27 cm

PEI CHUN PUBLIC SCHOOL

SEMESTRAL ASSESSMENT 1, 2017

MATHEMATICS

PRIMARY 5

PAPER 1

(BOOKLET B)

Total Time For Booklets A & B : 1 h

Name : _____ (   )

Class : Primary 5 ___

Date : 5 May 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 QUESTIONS.

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

WRITE YOUR ANSWERS IN THIS BOOKLET.

YOU ARE <u>NOT</u> ALLOWED TO USE A CALCULATOR.

16. Write five million, forty-two thousand and ten in figures.

Answer : _____

17. Find the value of $\frac{4}{7} + \frac{2}{5}$.

Answer : _____

18. Find the value of $\frac{3}{7} \times \frac{2}{7}$.

Answer : _____

19. Write down the first two common multiples of 3 and 5.
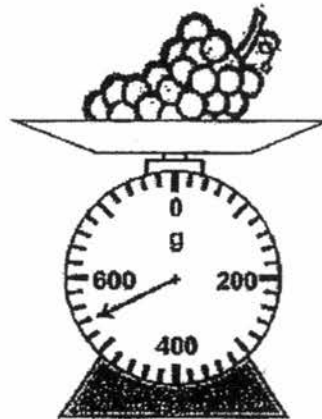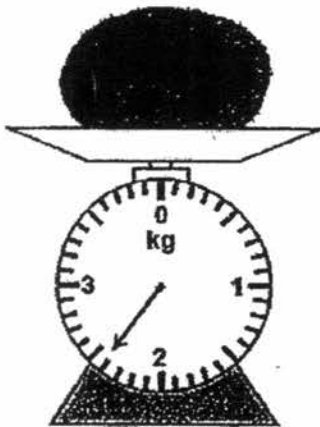
Answer : _____ and _____

SCORE

20. Mary has 6 times as much money as john. What is the ratio of the amount of money john has to the amount of money Mary has?

Answer : _____

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. Find the total mass of the watermelon and the bunch of grapes. Express your answer in kilograms and grams.

Answer : _____ kg _____ g

SCORE

22. (a) Round 32 504 to the nearest 10.

(b) The population of a town is 9000 when rounded to the nearest 100. What is the lowest possible number of people in that town?

Answer : (a) _____

(b) _____

23. What are the missing numbers in the boxes?

(a) $7000 \div \boxed{?} = 70$

(b) $48\,600 \div 300 = \boxed{?}$

Answer : (a) _____

(b) _____

24. What are the missing numbers in the boxes?

(a) $12.2 - 4.33 = \boxed{?}$

(b) $32.72 \div 8 = \boxed{?}$

Answer : (a) _____

(b) _____

SCORE

25. Find the value of

    (a) $10 - 4 \times 2 + 1$

    (b) $(54 + 6) \div 3 \times 2$

Answer : (a) _____

(b) _____

26. John had \$260. He spent $\frac{1}{5}$ of it on a pair of shoes. How much did John spend on the shoes?

Answer : \$ _____

.27. The participants in a quiz were Indians, Chinese and Malays in the ratio 2 : 7 : 4. There were 84 Malay participants. How many more Chinese participants than Indian participants were there?
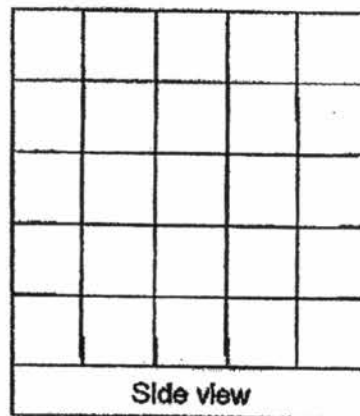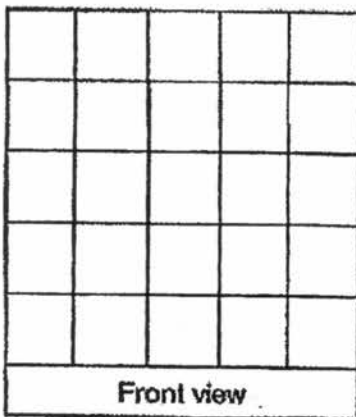
Answer : _____

SCORE

28. Seven unit cubes are used to build Solid M as shown below.
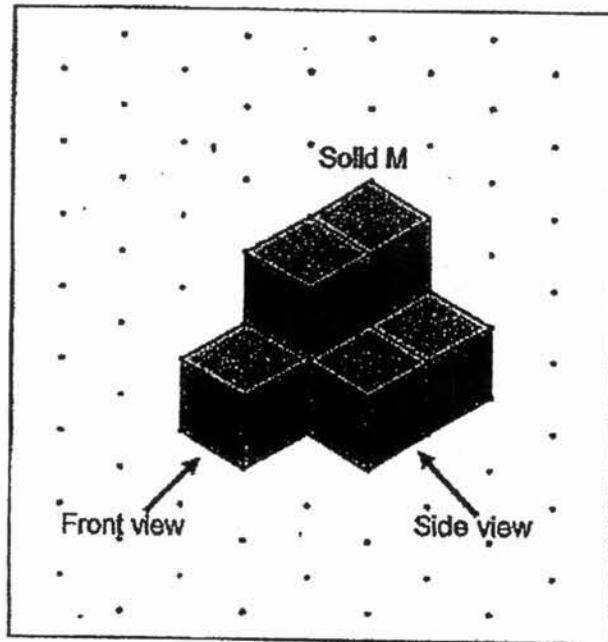
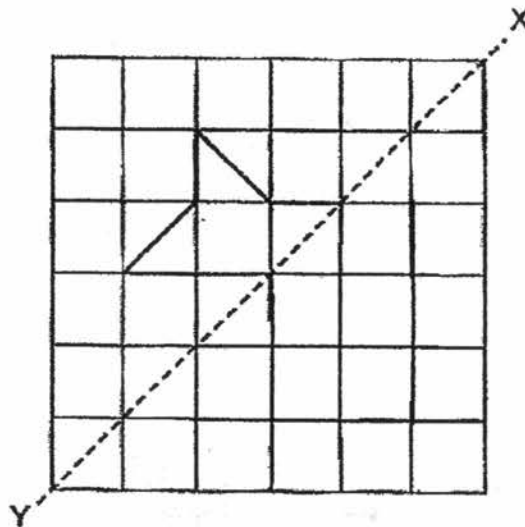Draw on the square grid below the front view and the side view of Solid M.

Front view

Side view

SCORE

29. (a) In the figure below, name two lines that are parallel to each other.
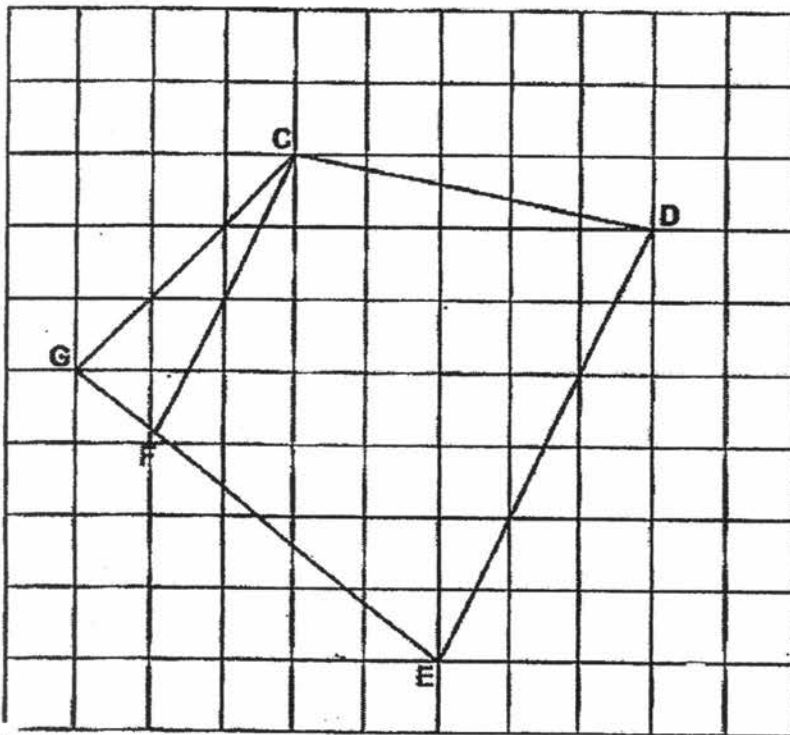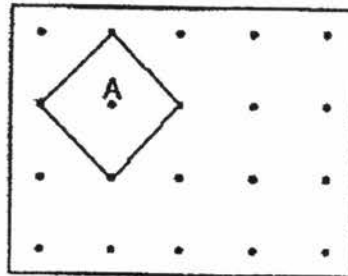

Answer : (a) _____ and _____

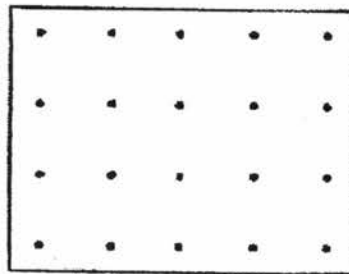(b) Draw the other half of the symmetrical figure along the line of symmetry XY.
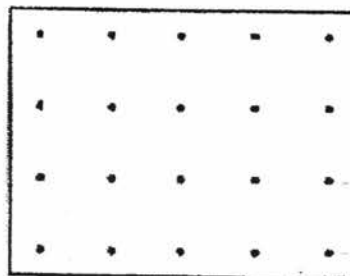
SCORE

30. The figure below shows Square A in a grid box.

(a) Draw a square that is twice as big as Square A in the grid below.

(b) Draw a rectangle that is 3 times as big as Square A in the grid below.

End of Paper

Set by : Mdm Joyce Cheng, Mr Stanley Soh and Mr Teng Beng Chye

SCORE

PEI CHUN PUBLIC SCHOOL

SEMESTRAL ASSESSMENT 1, 2017

MATHEMATICS

PRIMARY 5

PAPER 2

Time: 1 h 30 min

Name : _____ (   )

Class : Primary 5 ___

Date : 5 May 2017

Maths Teacher: _____

Parent's Signature: _____

Paper 1 (Booklet A)	20
Paper 1 (Booklet B)	25
Paper 2	55
TOTAL	100

1.   Alexis cut a 6-m coil of wire into 7 equal pieces. How long was each piece of
     wire in metre? Express your answer correct to 2 decimal places.

Answer : _____ m

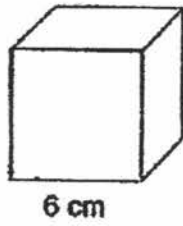2.   Find the area of the shaded triangle ACD shown below.
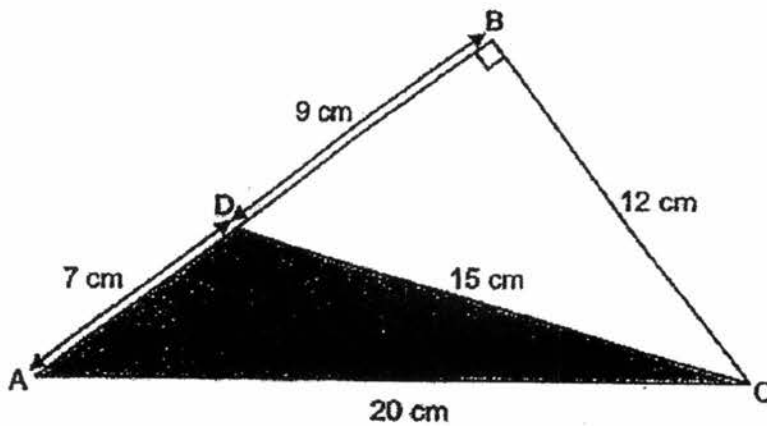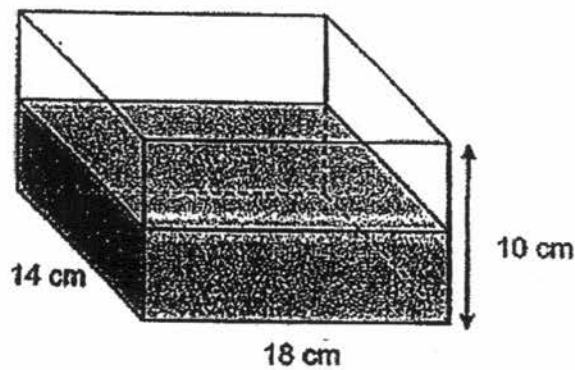

Answer : _____ cm²

SCORE

3.   Find the volume of a cube of edge 6 cm.

6 cm

Answer : _____ cm³

4.   A rectangular tank measuring 18 cm by 14 cm by 10 cm is $\frac{1}{2}$ filled with water.
     How much water is in the tank?

14 cm

10 cm

18 cm

Answer : _____ cm³

SCORE

5. Aishah bought 40 packets of drinks at $0.85 each. How much money did she give the cashier if she received $1 change?

Answer : $ _____

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. A large bowl cost $4. A small bowl cost $2.30 less than a large bowl.
   Omar bought the same number of bowls as Raj and paid $16.10 more than Raj.
   Omar bought only large bowls and Raj bought only small bowls.

   (a)   What is the cost of a small bowl?

   (b)   How many bowls did Raj buy?

Answer : (a) _____ [1]

         (b) _____ [2]

SCORE

7. The table below shows the number of boys and girls who wear or do not wear spectacles in a Primary 5 class. Some of the data are missing.

	Number of pupils who wear spectacles	Number of pupils who do not wear spectacles
Boys	6	12
Girls	?	?
Total	?	20

(a) What fraction of the boys wear spectacles?

(b) There are 42 pupils in the class. How many girls wear spectacles in the class?

Answer : (a) _____ [1]

(b) _____ [2]

SCORE

8. Bala gave a sum of money to his wife and 4 children in the ratio 5 : 9. His wife received $80. Each of his children received an equal amount of money. How much did each of his children receive?

Answer : _____ [3]

9. There are some marbles in a container. $\frac{1}{3}$ of the marbles are blue. $\frac{1}{4}$ of the remaining marbles are yellow and the rest are red.

   (a) What fraction of the marbles in the container are yellow?

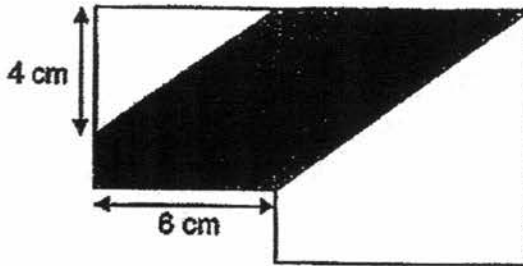   (b) There are 504 red marbles. How many yellow marbles are there in the container?

Answer : (a) _____ [1]

(b) _____ [2]

SCORE

10. The figure is made up of two squares. The area of the bigger square is 81 cm².
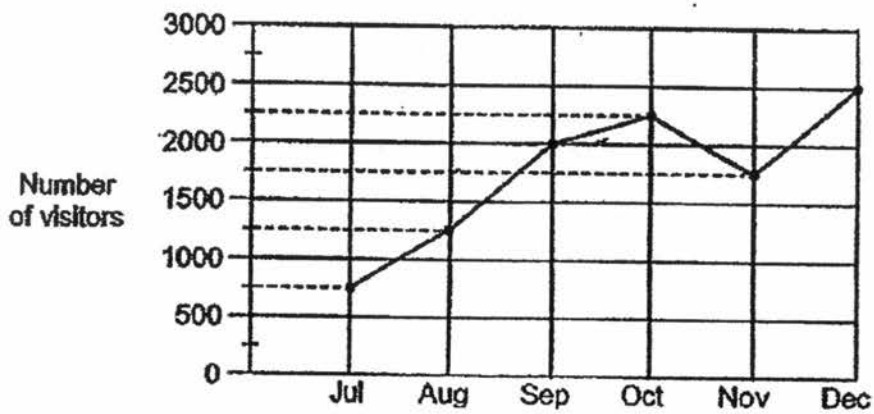
Find the area of the shaded part.

Answer : _____ [4]

SCORE

11. The graph below shows the number of visitors at a museum over 6 months.

(a) Find the difference in the number of visitors between August and October.

(b) In November, $\frac{3}{5}$ of the visitors were adults. How many children visited the museum in November?
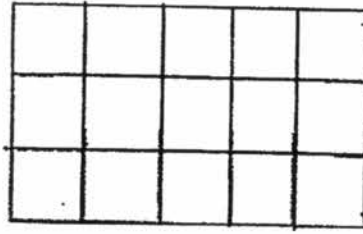
Answer : (a) _____ [1]

(b) _____ [2]

SCORE

12. Shannon bought 2 ℓ of apple juice. She drank $\frac{3}{8}$ of the juice and her brother

drank $\frac{2}{3}$ ℓ of the remaining juice   How much apple juice, in ℓ, had Shannon left?
Express your answer in fraction.

Answer : _____ [3]

SCORE

13. The figure below is formed by 5 identical rectangles. The total area of the figure is 375 cm².

(a) What is the length of each rectangle?

(b) What is the perimeter of the figure?

Answer : (a) _____ [3]

(b) _____ [2]

SCORE

14. In a quiz, every contestant has to answer 85 questions.
For every correct answer given, the contestant scores 3 points.
For every wrong answer given, 1 point is deducted.

Bill answered all the questions and scored a total of 183 points.
How many questions did Bill answer correctly?

Answer : _____ [4]

SCORE

15. Patrick sells biscuits. For every 3 tins of biscuits he sells, he earns $5.
For every 15 tins of biscuits he sells, he earns an additional $4.
How much money will Patrick earn if he sells 396 tins of biscuits?

Answer : _____ [4]

SCORE

16. Rachel, Sally and Tammy shared $372. After Rachel spent $\frac{2}{5}$ of her share, Sally spent $\frac{1}{2}$ of her share and Tammy spent $\frac{1}{3}$ of her share, the girls found that they had the same amount of money left.

(a) What was Sally's share of the money at first?
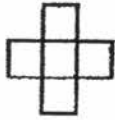
(b) How much money did the three girls spend altogether?
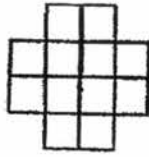
Answer : (a) _____ [3]

(b) _____ [2]

SCORE

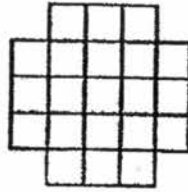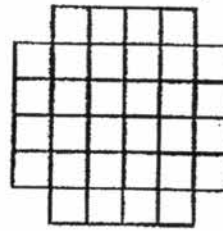17. Siew Chin used square tiles to form the following patterns.

Pattern 1 Pattern 2 Pattern 3 Pattern 4

The table below shows the number of square tiles in each pattern.

Pattern	Number of square tiles
1	5
2	12
3	21
4	31
5	(a)_____

(a) Complete the table above for Pattern 5. [1]

(b) How many square tiles are there in Pattern 25?

(c) Which pattern number will have exactly 320 square tiles?

Answer : (b) _____ [2]

(c) _____ [2]

End of Paper

SCORE

Do not write in this space

YEAR   : 2017

LEVEL   : P5

SCHOOL   : PEI CHUN PUBLIC SCHOOL

SUBJECT   : MATHEMATICS

TERM   : SA1

Paper 1 (Booklet A)

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

Paper 1 (Booklet B)

Q16   5042010

Q17   34/35

Q18   6/49

Q19   15,30

Q20   1:6

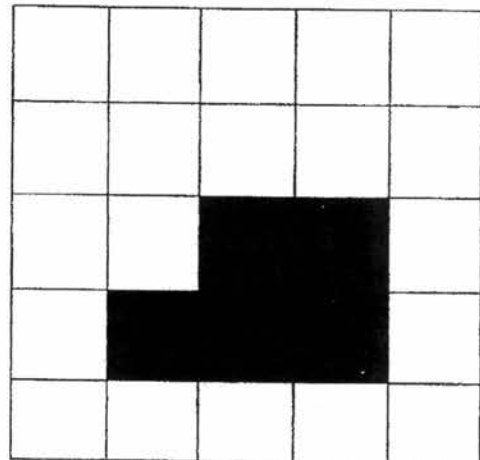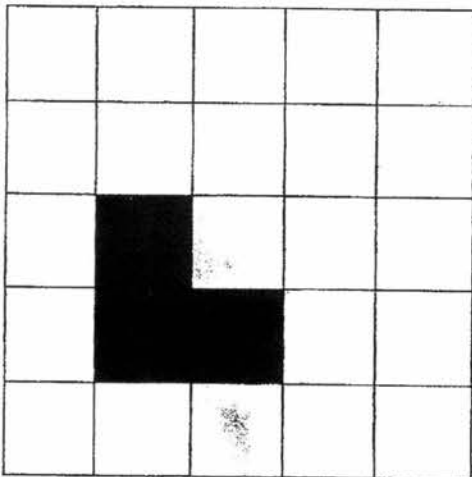Q21   2kg 940g

Q22   32500

Q23 (a) 100
 (b) 162

Q24 (a) 7.87
 (b) 4.09

Q25 (a) 3
 (b) 40

Q26 52

Q27 105

Q28

Q29 (a) CF,DE

(b)

Q30   (a)

(b)

Paper 2

Q1 Each piece→6÷7
         = 0.857
         = <u>0.86m</u>

Q2 Area of whole figure→1/2×(7+9)×12
                   = 1/2×16×12
                   = <u>96cm²</u>

       Area of unshaded part→1/2×12×9
                   = <u>54cm²</u>

       Area of shaded part→96-54
                 = <u>42cm²</u>

Q3 Volume of cube→6×6×6
               = <u>216cm³</u>

Q4 Height of water→10÷2
             = <u>5cm</u>

       How much water→14×18×5
                 = <u>1260cm³</u>

Q5 40 Packets cost→40×0.85
                = $34

       How much Aishah gave→34+1
                   = <u>$35</u>

Q6 (a) Cost of small bowl→$4-2.30
                   = <u>$1.70</u>

       (b) Extra→16.10÷2.30 = <u>7 bowls</u>

Q7 (a)   6/12+6
          = <u>6/18</u>

(b) Girls who do not wear spectacles→20-12 = 8
    Pupils who wear spectacles→42-20 = 22
    Girls who wear spectacles→22-6 = <u>16 girls</u>

Q8   5u=$80
      9u=$144
      4 Children=$144
      1 Children=$144÷4 = <u>$36</u>

Q9 (a) <u>1/6</u>

(b) 3u=504
    1u=504÷3
      =<u>168 yellow marbles</u>

Q10   Length of bigger square→9×9 = 81
      Unshaded area in smaller square→1/2×4×6 = 12
      Area of smaller square→6×6 = 36
      Shaded part in small square→36-12 = 24
      Shaded part in big square→1/2×9×6 = 27
      Total shaded area→27+24 = <u>51cm^2</u>

Q11 (a) Difference→2250-1250 = <u>1000 visitors</u>

(b) 2/5×1750 = <u>700 children</u>

Q12   Drank→3/8×2 = 6/8L
      Left →2L-6/8L-2/3L = <u>7/12L</u>

Q13   1 Square→375÷15 = 25

1 Breath→Square root of 25 = 5
(a) Length→5×3 = <u>15cm</u>
(b) Perimeter→8×2×5 = <u>80cm</u>

Q14 Total marks→85×3 = 255
1 group→3+1 = 4
Marks to return=>255-183 = 72
Wrong→72÷4 = 18
Correct→85-18 = <u>67 marks</u>

Q15 How much $ he earn (1 group) (15÷3)×5+4 = 29
? groups→396÷15 = 26R6
How much he earns→(26×29)+(5×2) = <u>$764</u>

Q16 (a) Rachel left →1 - 2/5 = 3/5 = 6/10
Sally left →1 - 1/2 = 1/2 = 6/12
Tammy left → 1 - 1/3 = 2/3 = 6/9
31 units = 372
1 unit = 372 ÷ 31 = 12
Sally →12x12 = <u>$144</u>

(b) 13 units →12x13= <u>$156</u>

Q17 (a) 45

(b) Pattern 1 → 5x1 = 5
Pattern 2 → 6x2 = 12
Pattern 3 → 7x3 = 21
Pattern 4 → 8x4 = 32

Pattern 25 → 29x25 = <u>725</u>

(c) 12x16 = 192
15x19 = 285
<u>16x20</u> = 320