PSLE STANDARD MATHEMATICS

PAPER 1

(45 marks)

Booklet 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 answer.
Write your answer (1, 2, 3 or 4) in the brackets provided.
The use of calculators is NOT allowed

1. In 356.174, what does the digit 7 stand for?

   (1)   7 thousandths

   (2)   7 hundredths

   (3)   7 tenths

   (4)   7 tens

                                                            (   )

2.   Find the value of 7 x 6 – 5 + 4 x 2.

   (1)   9
   (2)   29
   (3)   45
   (4)   51

                                                            (   )

3.   Kelvin had 48 marbles. He gave $\frac{1}{6}$ of them to John, who already had
      14 marbles. How many marbles had John in the end?

   (1)   6
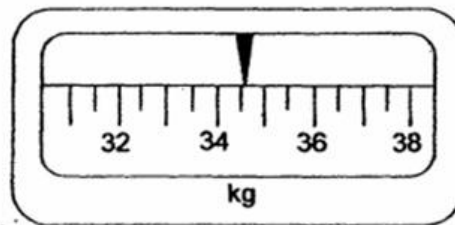   (2)   8
   (3)   20
   (4)   22

                                                            (   )

4. Which one of the following numbers is the largest?

    (1)   0.8

    (2)   0.72

    (3)   0.098

    (4)   0.605
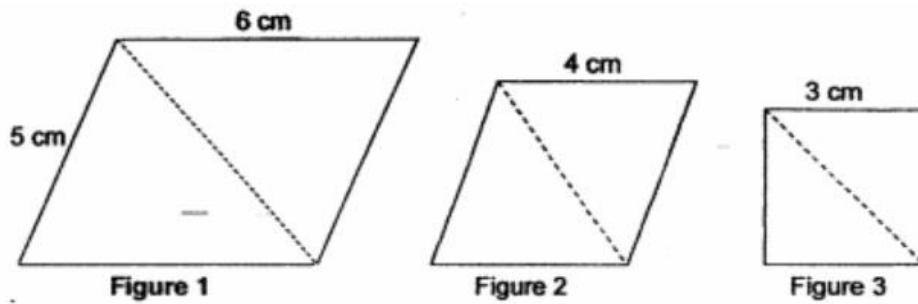
                                                            (   )

5. Which one of the following is closest to the reading shown on the weighing scale below?

    (1)   34.1kg

    (2)   34.6kg

    (3)   35.1kg

    (4)   35.6kg

                                                            (   )

6.   Sam cuts three figures shown below along the dotted lines. Figure 1 is a parallelogram, Figure 2 is a rhombus and Figure 3 is a square.
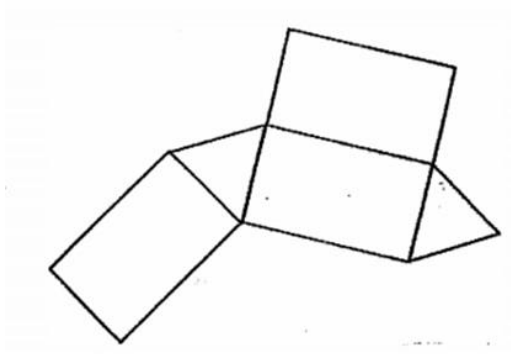

6 cm

4 cm

3 cm

5 cm

Figure 1   Figure 2   Figure 3

Which of the figures above consist(s) of at least one isosceles triangle after cutting?

(1)   Figure 1, 2 and 3

(2)   Figure 1 and 2 only

(3)   Figure 1 and 3 only

(4)   Figure 2 and 3 only

(   )

7.   The figure below shows a net of a solid.

What is the name of the solid formed by the net above?

(1) cone

(2) prism

(3) cuboid

(4) pyramid

(   )

8. Lisa and Kim went shopping. On average, each girl spent $28. Kim spent $12 less than Lynn. How much did Kim spend?

(1) $16

(2) $22

(3) $34

(4) $44

( )

9. Chan and David shared some marbles. Chan had $\frac{2}{7}$ of the number of marbles David had. What was the ratio of the total number of marbles the boys had to the number of stickers Chan had to the number of marbles David had?

(1) 9 : 2 : 7

(2) 9 : 7 : 2

(3) 7 : 2 : 5

(4) 7 : 5 : 2

( )

10. Michael cycled at an average speed of 24 km/h. How far did he travel after cycling for 120 minutes?

(1) 5 km

(2) 12 km

(3) 48 km

(4) 72 km

( )

11. Ahmad had $\frac{7}{8}$ kg of sugar. He packed them into smaller packets of $\frac{1}{4}$ kg each. What is the mass of the remaining sugar?

   (1) $\frac{1}{8}$ kg

   (2) $\frac{5}{8}$ kg

   (3) $\frac{7}{16}$ kg

   (4) $\frac{7}{32}$ kg

   (   )

12. Sharon started reading her bedtime story book at 11.50 p.m.
   She took 35 minutes to read it. At what time did she finish reading?

   (1)   11.15 a.m.
   (2)   11.15 p.m.
   (3)   12.25 a m.
   (4)   12.25 p.m.

   (   )

13. Cupcakes are sold at Han's Bakery at the prices shown below.

HAN'S BAKERY

Chocolate Cupcakes	Strawberry Cupcakes
$2 each	$3 each

Haniza spent a total of $50 on 16 chocolate cupcakes and some strawberry cupcakes. How many strawberry cupcakes did Haniza buy?

(1) 6
(2) 9
(3) 10
(4) 18

(   )

14. The pie chart represents the favourite animal of the pupils in Primary 6 Benevolence. There are as many fish as birds. How many pupils chose the terrapins as their favourite animal?
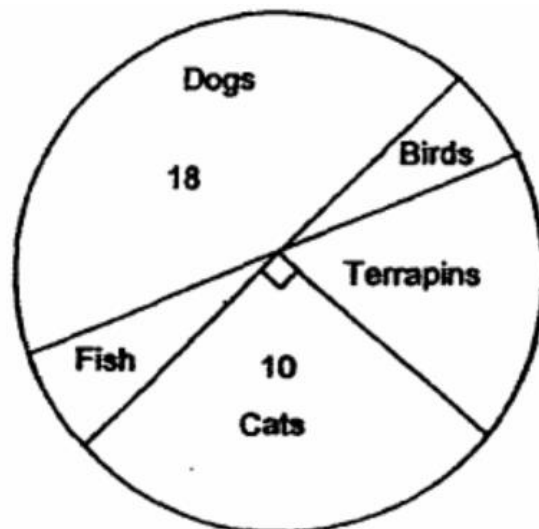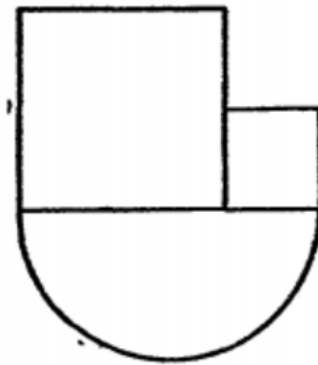

(1) 2
(2) 4
(3) 5
(4) 8

(   )

15. The figure below is made up of a semicircle and two squares of sides

10 cm and 4 cm. Find the area of the figure. Give your answer in terms of π.

(1) $(116 + 24.5\pi)$ cm^2
(2) $(116 + 98\,\pi)$ cm^2
(3) $(34 + 14\,\pi)$ cm^2
(4) $(34 + 7\,\pi)$ cm^2

(   )

Booklet B: (25 marks)

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. The use of calculators is <u>NOT</u> allowed.

(5 marks)

16.   Find the value of $\dfrac{1}{6} \div \dfrac{4}{9}$.

Give your answer in the simplest form.

Ans: _____

17.   Find the value of $8w - \dfrac{3w}{2}$ if $w = 4.$

Ans: _____

18.   Sharon took 10 minutes to cycle from her house to the park which was

3 km away. What was Sharon's average speed?

Ans: _____ km/h

19.   Simon's height is 1.85 m. Round off his height to the nearest tenth.

   Ans: _____ m

20.   Angie went to bed at 22 00 and woke up the next day at 06 10. How long
       did Angie sleep? Give your answer in hours and minutes.

                                          Ans: _____h _____ min

Questions 21 to 30 carry 2 marks each. Show your working dearly and write your answers the spaces provided. For questions which require units, give your answers in the units stated. The use of calculators is <u>NOT</u> allowed.

(20 marks)

21. The pie chart shows the favourite sports of some children.
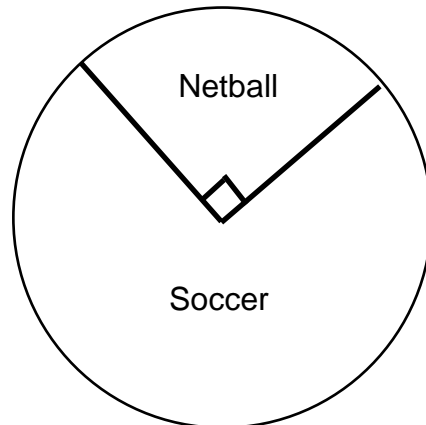
a) If $\frac{4}{5}$ of the children who like soccer are boys, what fraction of the total number of children are boys who like soccer?

b) There are 15 boys who like soccer. How many children are there altogether?

Ans: (a) _____

(b) _____

22. The table below shows a card game. Clement needs to cross out 4 numbers in a row or in a column to win this game. This row or column of 4 numbers needs to have 2 common factors that are greater than 3 but less than 10. What are the 2 common factors?

34	45	27	54
63	56	81	36
32	29	33	18
15	18	24	72

Ans: _____and _____

23. The sum of two numbers is 325.8. The first number has three decimal places. The second number is 199 times the first number. Find the first number and round off your answer to one decimal place.

Ans: _____

24. A company sells plastic containers measuring 5 cm by 5 cm by 5 cm. The plastic containers are packed into cardboard boxes measuring 35 cm by 32 cm by 30 cm. What is the maximum number of plastic containers that can be placed in each cardboard box?

Ans: _____

25. The usual price of a television is $1625. John bought the television at a discount of 20%. He had to pay a 7% GST on the discounted price. How much did he pay for the television in total?

Ans: _____ %

26. The 2 right-angled triangles that form XYZ are identical to the 8 triangles in ABCD. EFGH is a square of area 25 cm^2 and AB is 9 cm. Find the area of XYZ.
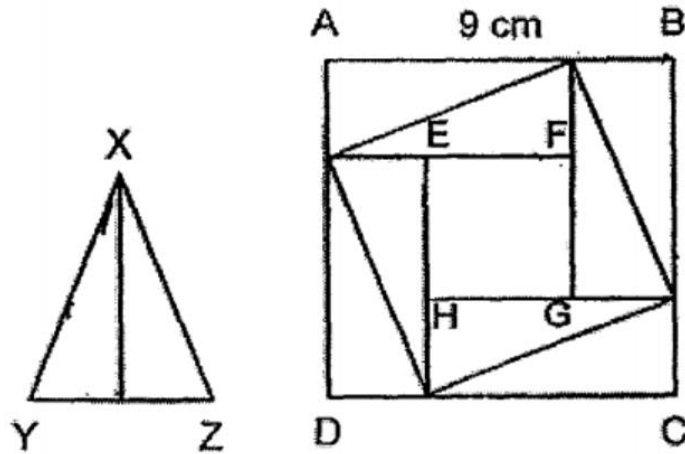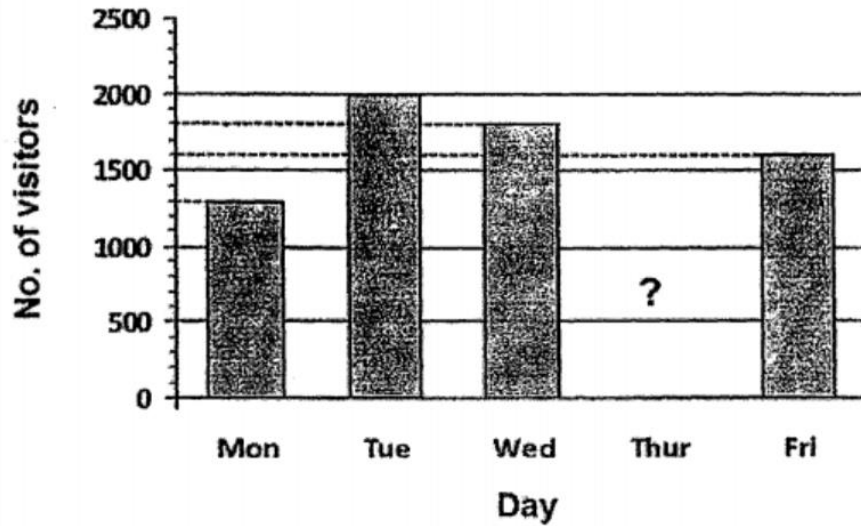

Ans:_____ cm^2

27. Mat and Minah had some cookies in the ratio 5 : 2.

Mat ate 38 cookies and Minah made another 43 cookies.

Then Mat and Minah had the same number of cookies.

How many cookies did Minah have at first?

Ans:_____

28. The graph below shows the number of visitors at Kidz Club from Monday to Friday. The bar that shows the number of visitors on Thursday has not been drawn. If the percentage of visitors decreased by 36% from Thursday to Friday, what is the number of visitors on Thursday?
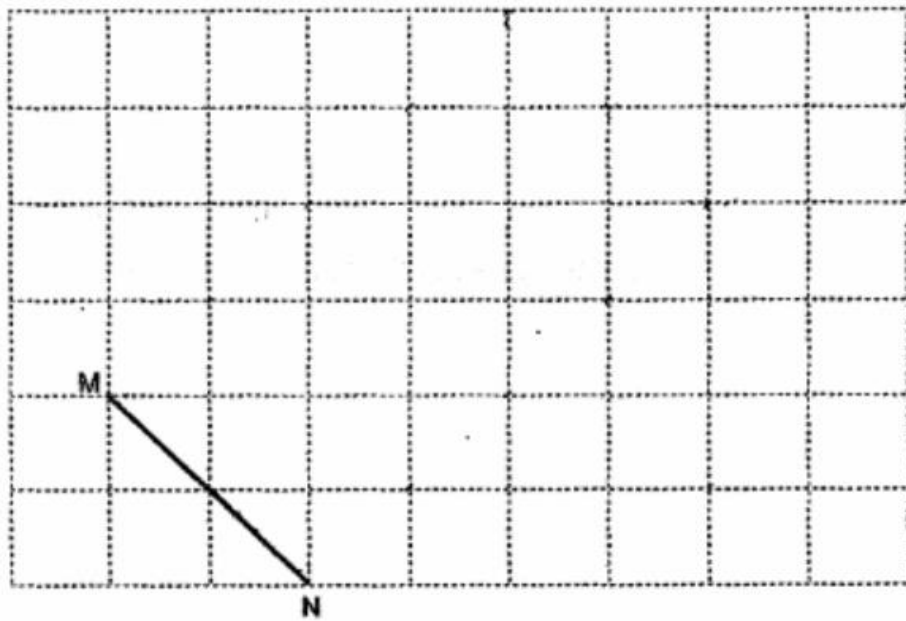

Ans:_____

29. A wire is bent to make the figure below. It consists of 3 semicircles.

Find the length of the wire. Take π = **3.14**
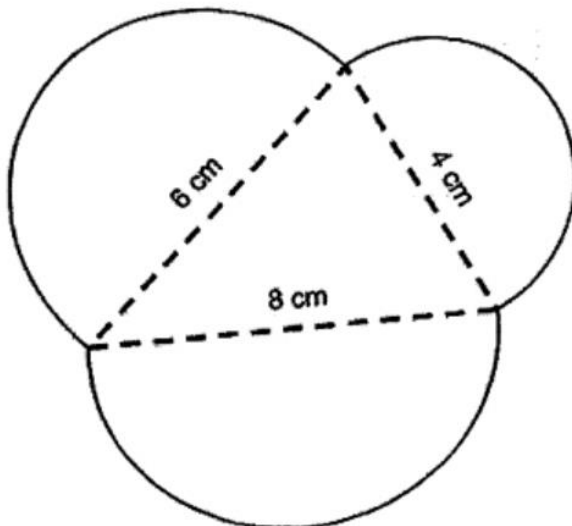
Ans:_____ cm

30.   MN forms one side of a rectangle LMNO. LM is twice the length of MN.
       Complete the drawing of the rectangle in the square grid below

PSLE STANDARD MATHEMATICS

PAPER 2

(55 marks)

Questions 1 to 5 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. You may use a calculator.

(10 marks)

1. Zhi Lee had a total of 345 local and foreign stamps. He gave half of his local stamps away and bought 15 more foreign stamps. In the end, the number of the foreign stamps he had was thrice as many as the number of local stamps. How many local stamps did he have at first?

Ans:_____

2. Jill wanted to buy 7 identical dresses but found that she was short of $14.50. In the end, she bought 5 of the dresses and had $8.50 left. Find the cost of each dress.

Ans: $_____

3. The average number of mangoes in 5 baskets was 53. When another basket of mangoes was added, the average number of mangoes became 49. How many mangoes were there in the last basket?
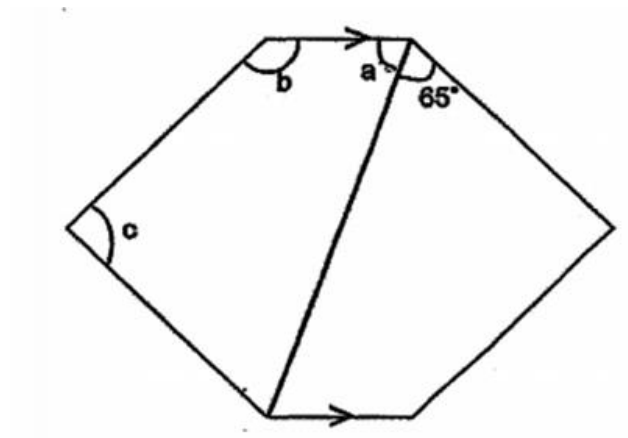
Ans:_____

4. The figure below shows 8 identical cubes which are glued together to form a solid.
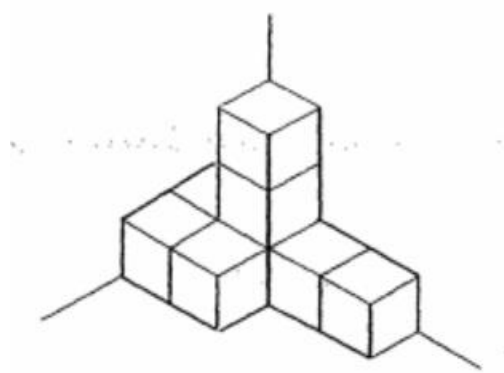
The whole solid, including the base, is then painted blue. How many of the cubes have at least 4 of its faces painted blue?

Ans:_____

5.   The figure below is made up of 2 similar 4-sided figures. Find the sum of

$\angle a + \angle b + \angle c$.

Ans:_____°

For questions 6 to 17, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded Is shown in brackets [   ] at the end of each question or part-question.

6. Simon earns $4600 per month. He gives his children $1500, his wife 20% of his remaining salary and saves the rest. How much will his wife get if Simon gets a 10% pay raise?

Ans:_____ [3]

7. The selling price of each cup of lemon juice is $\frac{3}{2}$ times as much as the selling price of a cup of apple juice. For every 2 cups of lemon juice sold, Mr Tan sells 5 cups of apple juice. He earns $12 more from apple juice than from lemon juice. How much does Mr Tan earn altogether?
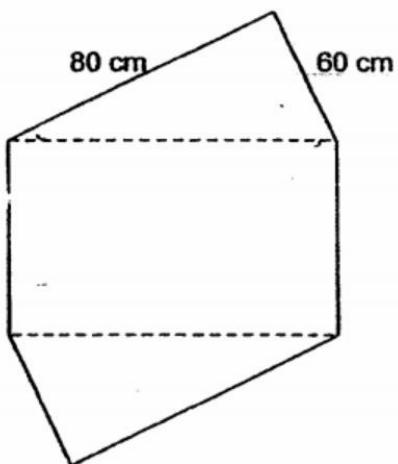
Ans:_____ [3]

8.   In the figure below, 7 small identical circles are drawn inside a big circle of radius 30 cm. Take π = 3.14, find the area of the shaded region.
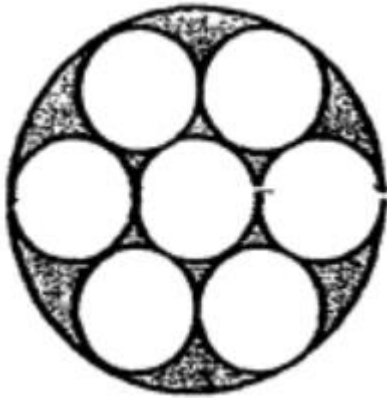
Ans:_____ [3]

9.   The figure below is made up of a rectangle and 2 identical right-angled triangles with sides measuring 60 cm, 80 cm and 100 cm. The perimeter of the figure is 420 cm. Find the area of the figure.

Ans:_____ [3]

10. A fruit seller had 33 more watermelons than papayas. After he sold $\frac{1}{3}$ of the watermelons and $\frac{4}{5}$ of the papayas, he had 57 more watermelons than papayas. How many papayas did he have at first?

Ans:_____ [3]

11. The ratio of Ansen's savings to Billy's savings became 3 : 11 after Ansen gave $\frac{1}{10}$ of his savings to Billy. Both later spent the same amount of money at a book fair. In the end, the ratio of Ansen's savings to Billy's savings became 1 : 9 and Billy had $264 more than Ansen.
    (a)   What was the ratio of Ansen's savings to Billy's savings at first?
    (b)   How much savings did Ansen had at first?

Ans:(a) _____ [1]

(b) _____ [3]

12. 2 small rectangles are cut out from a rectangular piece of paper along
     the dotted lines as shown below. The breadth of the paper is 15 cm.
     The perimeter of the paper after cutting is 82 cm.

Before cutting   **After cutting**

7 cm

15 cm   15 cm

8 cm

3 cm

13 cm
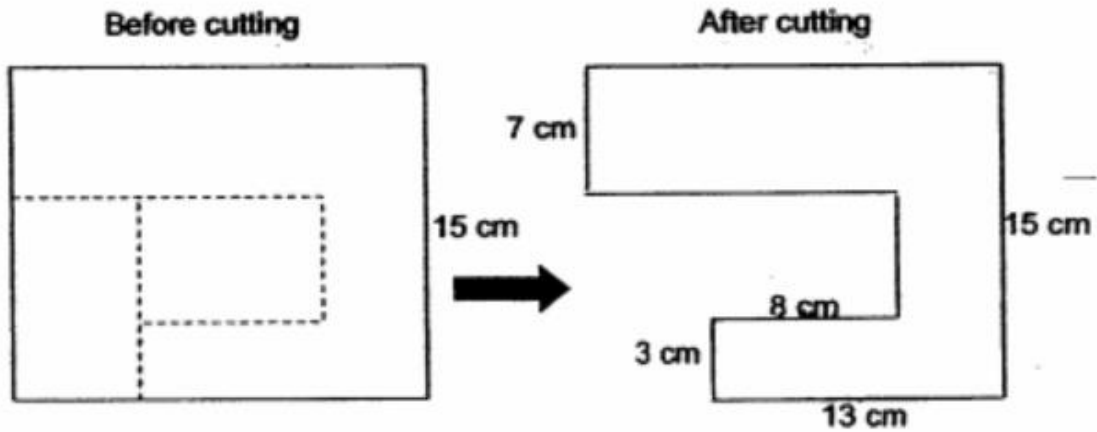
(a) What is the length of the rectangular paper before the cutting?
(b) What is the area of the remaining paper after the cutting?

Ans:(a) _____ [2]

(b) _____ [2]

13. John left Town G at 10 00 and drove to Town H at an average speed of 60 km/h. Half an hour later, Ian left Town G and drove to Town H travelling along the same route as John. He met John at a petrol station at 13 00 before reaching Town H at 14 00. The petrol station was 10 km from Town H.

(a) Find the distance between Town G and Town H.

(b) Find the average speed of Ian for the whole journey. (assuming he did not stop at the petrol station. Give your answer correct to the nearest whole number.)

Ans:(a) _____ [2]

(b) _____ [2]

14. The pie chart below shows the different types of biscuits sold at a supermarket.
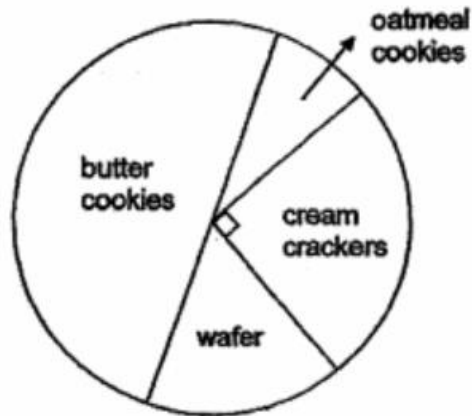

Half of the biscuits sold at the supermarket were butter cookies. The number of packets of wafer biscuits sold was $\frac{1}{3}$ of the number of packets of butter cookies sold.

a) What fraction of the biscuits sold were oatmeal cookies?

b) 1470 packets of butter cookies were sold. Find the total number of packets of wafer biscuits and oatmeal cookies sold.

Ans:(a) _____ [2]

(b) _____ [2]

15. Study the pattern below. The first four figures are shown.

Figure 1   Figure 2   Figure 3   Figure 4
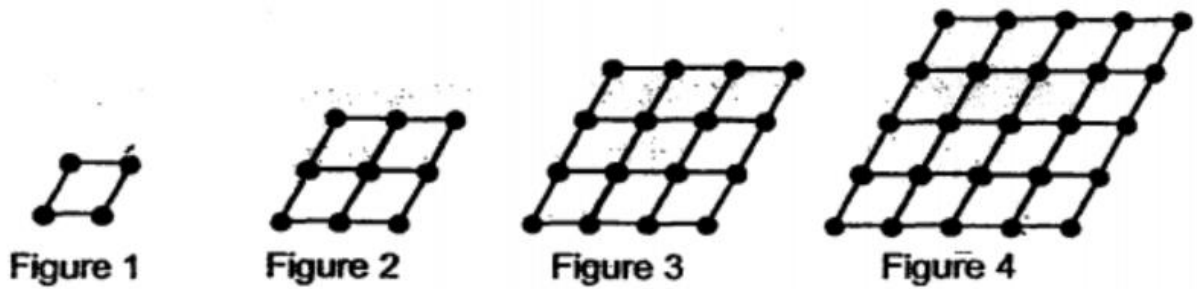
The table below shows the number of sticks and dots used to form each figure.

(a) How many dots are used to form Figure 12?
(b) How many sticks are used to form Figure 14?

Figure	Number of sticks	Number of dots
1	4	4
2	12	9
3	24	16
4	40	25

Ans:(a) _____ [2]

(b) _____ [2]

16. The figures below show a rectangular tank P and a cubical tank Q.

Tank P measures 60 cm by 18 cm by 35 cm. It is completely filled with water. Both tap A and tap B were turned on at the same time for 20 minutes. Water flowed from tap A into tank P at a rate of 500 cm^3 per minute. Water drained out from tap B at a rate of 800 cm^3 per minute and was collected in tank Q.

Tap A

35 cm

Tap B

60 cm

18 cm
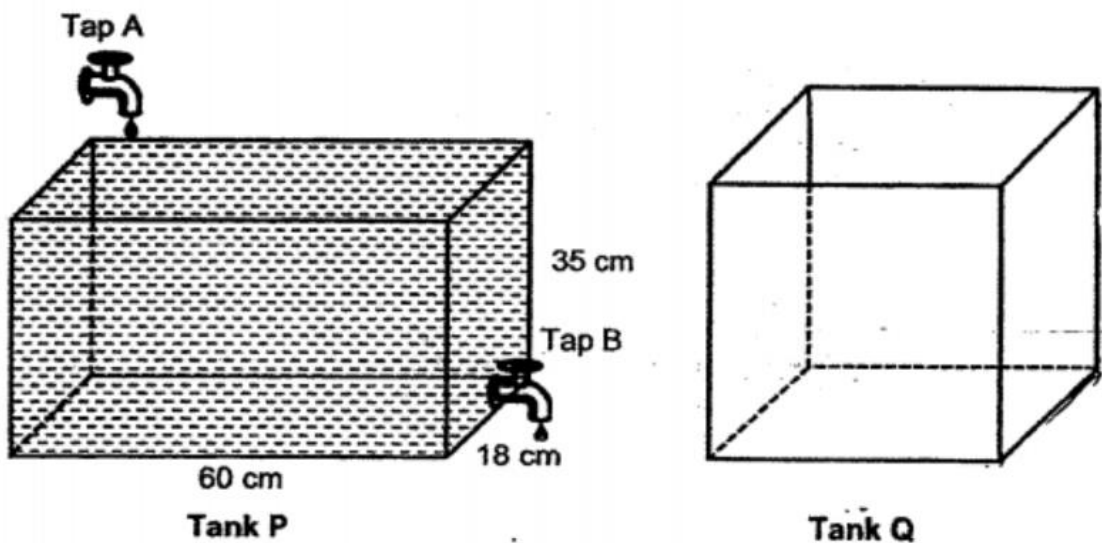
Tank P

Tank Q

(a) How many litres of water was left in tank P at the end of 20 minutes?

(b) Given that tank Q had a capacity of 64 litres, what would be the height of the water level in tank Q at the end of 20 minutes?

Ans:(a) _____ [3]

(b) _____ [2]

17. Mr William sold 4 times as many iPads as laptops and collected a total

of $8400. Each laptop costs $325 more than an iPad. The amount collected for all the iPads sold was $3480 more than the amount collected for all the laptops sold. How many laptops did Mr William sell?

Ans:_____ [5]