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 Grade }

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Time }

Paper I

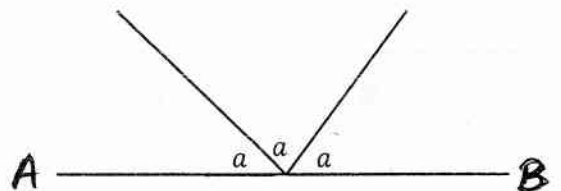
- 1) Write the next two terms of the number pattern 26, 24, 22,...

2) In the angle 45°

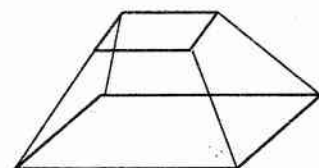
- Write the supplement.
- Write the complement.

3) Find the value of $(-8) - (-2)$.

4) If AB is a straight line, find the value of a .



5) Find the number of edges in the following figure.



6) Find the H. C. F of the numbers 36, 24, 60.

7) In a certain house $2\text{ kg } 75\text{ g}$ of rice required per day. Find the mass of rice they required for week.

8) Find the value of $(-5)^3$.

9) In a regular hexagon,

i. How many symmetrical axes?

ii. Find the order of rotational symmetry.

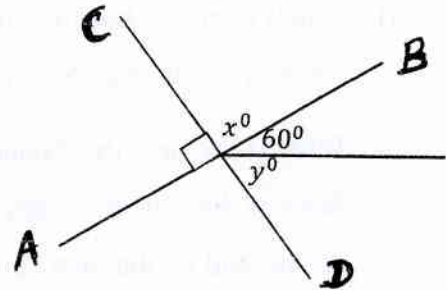
10) If $\frac{1}{4}$ of a bread given to one child, to how many children can 7 loaves of bread are given?

11) If $64 \times 17 = 1088$ then, find the value of 0.64×1.7 .

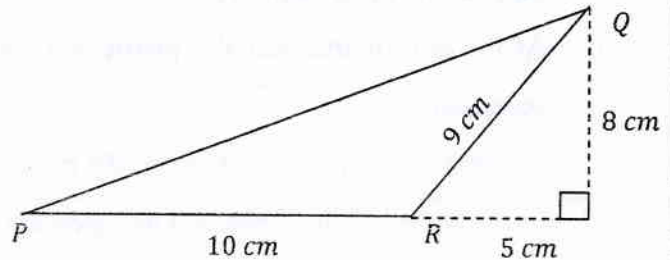
12) If $\frac{a}{3} + 1 = 3$ then find the value of a .

13) A trader brought some eggs and 8% of them were broken. If the number of remaining eggs were 276 then find the total number of eggs that he brought.

14) AB and CD are straight lines. Find the value of x and y .



15) Find the area of the triangle PQR .



16) Sri Lanka is belongs to $+5\frac{1}{2}$ time zone and Australia is belongs to $+10$ time zone. Find the time of Sri Lanka, when the time of Australia is 15:30.

17) Write the reciprocal of $\frac{5}{8}$.

18) Find the total surface area of a cube which the side length is 3 cm.

19) Write 36% as a fraction and simplify.

20) Write an example for a null set.

Paper II

- Answer **first question** and another **four questions**.
- First question carries 16 marks and other questions carries 11 marks.
- Write the answers in another paper for Paper II and attach it to the Paper I.

1) Recall your memory on the assessment that you have done in the class room, in order to percentage, fractions and ratio and answer the following questions.

(a) Nishadi started a business on production of plants by investing Rs.24 000. At the end of the 8th month of the year, Samadhi joined with her by investing Rs.48 000.

- What is the time that Nishadi invested her money? (1mark)
- What is the time that Samadhi invested her money? (1mark)
- At the end of the year, the total profit will divided among Nishadi and Samadhi. Find the ratio of the profit will divide. (2 marks)
- At the end of the year the profit was Rs: 30000. Find amount of profit received by each separately. (4 marks)
- Express as a fraction that the profit received by Nishadi from the money invested.(2 marks)
- Express the profit of Nishadi as a percentage. (3 marks)

(b) A certain sweet is made by mixing flour and sugar in the ratio 4:1 while sugar and butter in the ratio 3:2. Find the ratio of flour, sugar and butter. (3 marks)

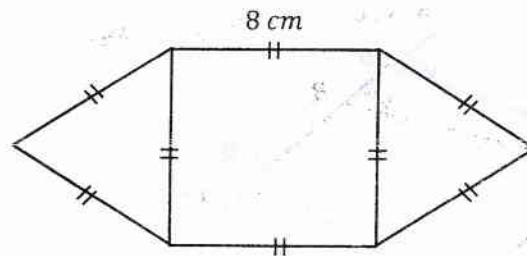
- 2) i. Solve : $5(y + 2) = 50$ (2 marks)
- ii. Find the value of $54.24 \div 0.4$ (2 marks)
- iii. Simplify : $4x(x - 5) - 2x(x + 8)$ (2 marks)
- iv. If $x = 2, y = 1$ and $z = -2$ then find the value of $2x - 3y + 5z$ (2 marks)
- v. Write 576 as a product of prime factors. (2 marks)
- vi. Find the value of $\sqrt{576}$ using the above answer. (1 mark)

3) The perimeter of a square is 36 cm.

- (a) i Find the length of a side of that square. (2 marks)
- ii. Find the length of a side of an equilateral triangle which is equal in perimeter of the above square. (2 marks)
- iii. Write the suitable values of 3 sides of an isosceles triangle which is equal in perimeter of the above square. (2 marks)
- iv. Write a suitable length and breadth of a rectangle which is equal in perimeter of the above square. (2 marks)

(b) Find the perimeter of the following figure.

(3 marks)



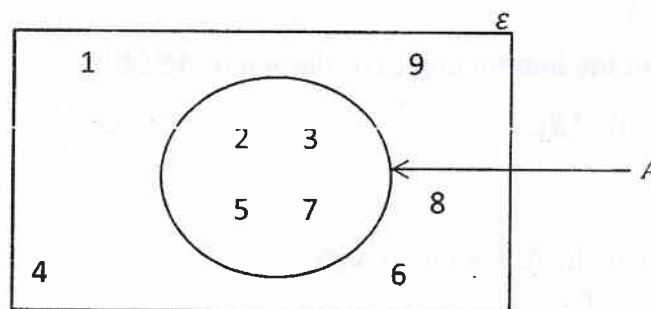
4) (a) i. Write a set which $n(A) = 5$.

(2 marks)

ii. $B = \{\text{letters of the word "KATHARAGAMA"}\}$, Write the set B as list.

(2 marks)

(b) According to the given Venn diagram,



i. Write the set A as a list.

(2 marks)

ii. Write the set A as a description.

(2 marks)

iii. Write the elements of the universal set.

(1 mark)

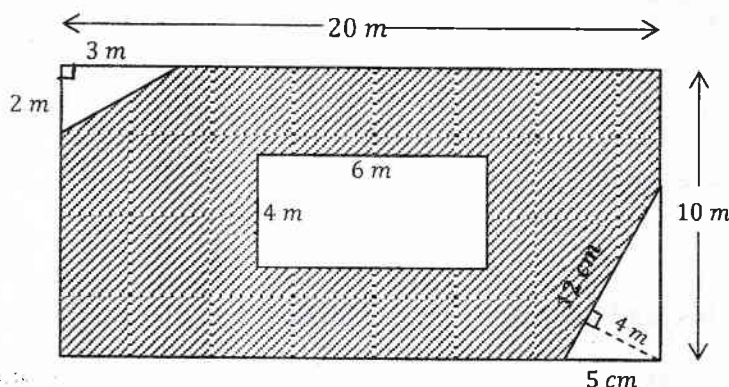
iv. Find the value of $n(A)$.

(1 mark)

v. Find the value of $n(\epsilon)$.

(1 mark)

5) The following figure shows the plan of a garden which is drawn by an architect.



Triangular portions denote the flower beds and rectangular portion denotes a pond.

i. Find the total area of the garden.

(2 marks)

ii. Find the area of two flower beds.

(4 marks)

iii. Find the area of the pond.

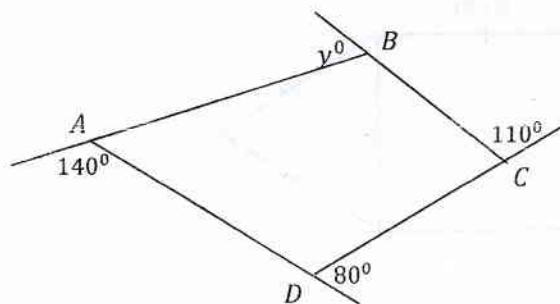
(2 marks)

iv. Find the area of the shaded portion which is grass planted.

(3 marks)

6) Answer the following questions according to the given figure.

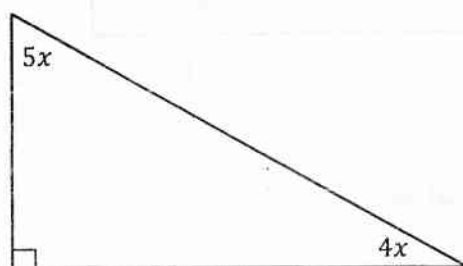
(a)



- i. Find the value of x . (2 marks)
- ii. Find the value of y . (2 marks)
- iii. What is the sum of the interior angles of the figure $ABCD$? (1 mark)
- iv. What is the value of $\angle ABC$? (2 marks)

(b) Find the value of x in the following triangle.

(3 marks)



7) (a)

- i. Find the value of $2\frac{1}{4} \times \frac{5}{9}$. (3 marks)
- ii. Simplify: $1\frac{2}{5} + 2\frac{1}{3}$. (3 marks)
- iii. Find the value of $\frac{5}{8} \div 1\frac{1}{2}$. (3 marks)

(b) A father gave $\frac{3}{5}$ of his land to his son. The remainder was given to his daughter. What is the fraction that daughter has? (2 marks)