

Question 1.

If the side of an equilateral triangle is l , then express the perimeter of the triangle in terms of l .

Solution:

Perimeter (P) of the equilateral triangle with side l =

Sum of the lengths of sides of the equilateral triangle

$$= l + l + l = 3l$$



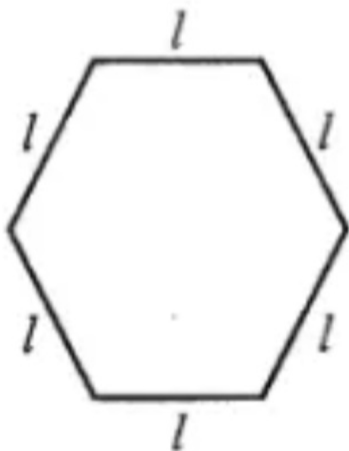
Question 2.

The side of a regular hexagon is l . Express its perimeter in terms of l .

Solution:

Perimeter (P) of the regular hexagon with side l =

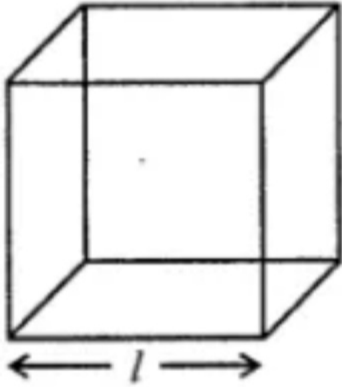
Sum of the lengths of all sides of the regular hexagon



$$= l + l + l + l + l + l = 6l$$

Question 3.

The length of an edge of a cube is l . Find the formula for the sum of lengths of all the edges of the cube.



Solution:

Total length (L) of the edges of a cube = Sum of the lengths of all (12) edges of the cube.

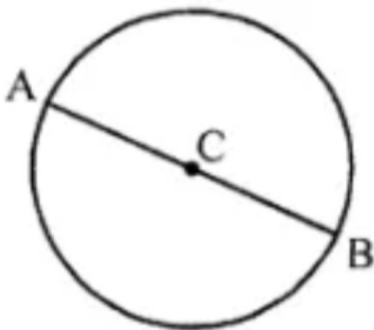
$$= l + l + l + l + l + l + l + l + l + l + l + l = 12l$$

Question 4.

If the radius of a circle is r units, then express the length of a diameter of the circle in terms of r .

Solution:

Draw a circle



Let AB is a diameter of the circle

C its centre

$$AB = AC + CB$$

$$\Rightarrow d = r + r$$

$$\Rightarrow d = 2r$$

