AEES DISTANCE LEARNING PROGRAMME 2020

CLASS 6

HAND OUT

MATHEMATICS

LESSON-10

MENSURATION

MODULE 1/2

Triangle, Rectangle and Square etc. are plane figures

They are closed by sides.

Total sum of lengths of boundary is called **Perimeter**.

We compare the perimeters.

The idea of perimeter is used in our everyday life.

- To fence the field.
- To build compound wall around a house.
- A track to conduct sports.

RECTANGLE

*Perimeter of a rectangle = 2 x (length + breadth)

i,e the perimeter of a rectangle is double of the sum of it's length and breadth.

*A rectangle has two equal lengths and two equal breadth.

SQUARE

*It has four equal sides.

*A square has four equal sides and equal angles.

Perimeter of a square=4 x length of it's one side.

*Perimeter of a square is equal to four times of its one side.

Example- Find the perimeter of a square whose one side is 17.5 m long.

Solution-

One side of square=17.5 m

Perimeter of square=4 x length of one side

=4 x 17.5 metre

=70 metres

TRIANGLE

*Perimeter of a triangle is the sum of its three sides.

*Equilateral triangle has three equal sides.

*Perimeter of an equilateral triangle is three times of its one side.

*Perimeter of equilateral triangle =3 x length of one side.

*An equilateral triangle has three equal sides and equal angles.

CLOSED FIGURES

*Closed figures having equal sides and equal angles are called regular closed figures.

*Equilateral triangle, square, pentagon, hexagon, octagon, etc are regular closed figures.

*Perimeter of a Pentagon is five times of its side.

*Pentagon has five equal sides and angles.

*Perimeter of a pentagon = 5 x length of a side.

*A hexagon has six equal sides and equal angles.

*Perimeter of a hexagon is six times of its side.

*Perimeter of a hexagon= 6 x length of a side.

*A heptagon has seven equal sides and equal angles.

*Perimeter of a heptagon is seven times of its side.

*Perimeter of a heptagon=7 x length of a side.

*An octagon has eight equal sides and equal angles.

*Perimeter of an octagon is eight times of its side.

*Perimeter of an octagon =8 X length of a side.

Problem

1. Find the perimeter of a pentagon whose one side is 8 cm.

Solution-

Length of a side= 8 cm

Perimeter of a pentagon=5 x length of a side

=5 x 8 cm=40 cm

So, the perimeter of the pentagon is 40cm.

2. Find the perimeter of a hexagon whose one side is 9 cm long.

Solution-

Length of a side= 9 cm

Perimeter of a hexagon = 6 x length of a side

= 6 x 9 cm= 54 cm

So, the perimeter of the hexagon is 54cm.

3. Find the perimeter of an octagon whose one side is 12 cm long.

Solution-

Length of a side=12 cm

Perimeter of an octagon = 8 x length of a side

= 8x12 cm=96 cm

So, the perimeter of the octagon is 96cm.

WE DISCUSSED ABOUT THE FOLLOWING POINTS IN THIS MODULE.

I) Plane figures.

II)Example of perimeter.

III) Definition of perimeter.

IV) Perimeter of rectangle

V) Perimeter of square.

VI) Perimeter of triangle.

VII) Perimeter of equilateral triangle.

VIII) Problems related to perimeter of plane figures.