Chapter 10

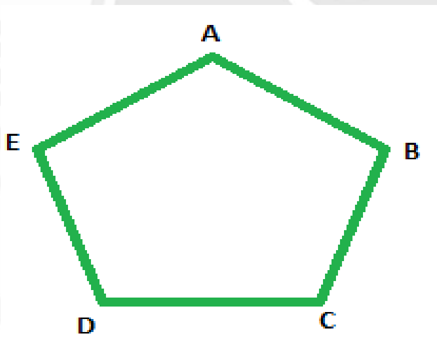
Mensuration

Mensuration:

Mensuration is the branch of mathematics that deals with the measurement of length, area or volume of various geometric shapes.

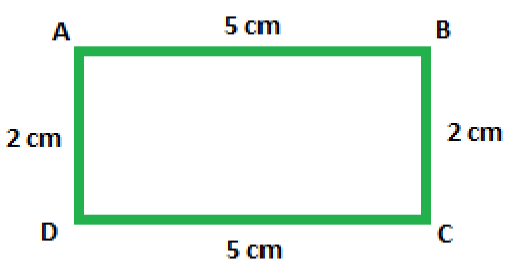
Perimeter:

Perimeter is the total length or total distance covered along the boundary of a closed shape.



Perimeter of above figure = AB + BC + CD + DE + EA

Perimeter of a Rectangle:



Perimeter of the above rectangle = AB + BC + CD + DA

= AB + BC + AB + BC   (Since AB = CD and BC = DA)

= 2 x AB + 2 x BC

= 2 x (AB + BC)

= 2 x (5 cm + 2 cm)

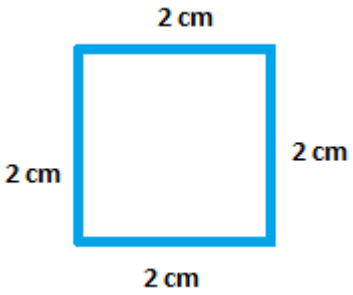
= 2 x 7cm

= 14 cm

Perimeter of regular shapes:

Perimeter of Square:

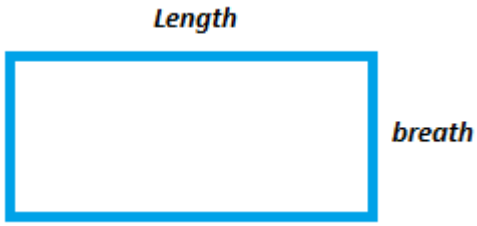
Perimeter of a Square = 4 x length of a side



Perimeter of above square = 2 cm + 2 cm + 2 cm + 2 cm = 8 cm

Or 4 x 2 cm = 8 cm.

Perimeter of a Rectangle

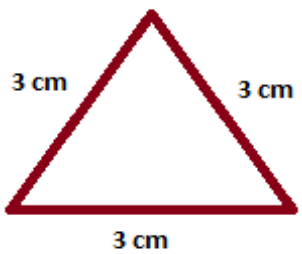


Perimeter of the rectangle = sum of lengths of each four sides

= 2 x (Length + Breath)

Perimeter of a Triangle

Perimeter of an equilateral triangle = 3 x length of a side



Perimeter of the above equilateral triangle = 3 + 3 + 3 cm

= 3 x 3 cm = 9 cm

Area

The total amount of surface enclosed by a closed figure is called its area.

Area of square = side x side = side^2

Area of rectangle = length x breath

Area of triangle = ½ x base x height.