

# CLASS-7

## LESSON-9 PERIMETER AND AREA

(This PDF Based on NCERT Book)

### AREA AND PERIMETER OF PARALLELOGRAM(समांतर चतुर्भुज का क्षेत्रफल और परिमाण)-

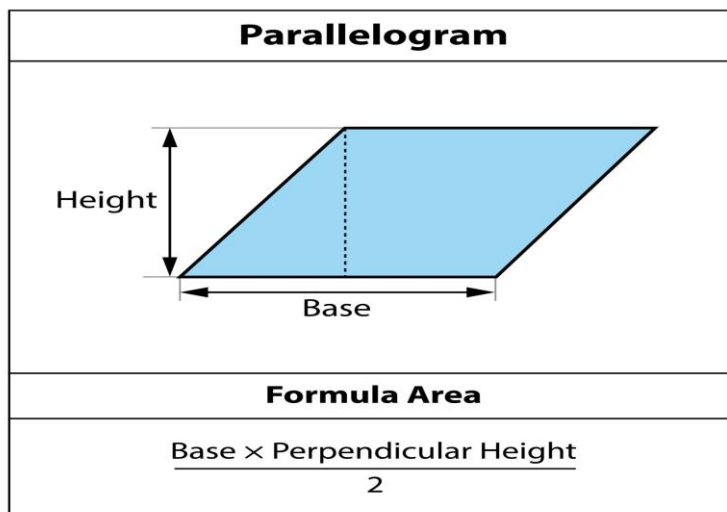
To find the **area of a parallelogram**, you can use one of two main formulas, depending on the information you have.

The area of a parallelogram  $A = \text{breadth} \times \text{length} = l \times h$ .

The perimeter of a parallelogram  $P = 2(l + h)$ .

where:

- A is the area.
- b is the length of the base (any side of the parallelogram).
- h is the height, which is the perpendicular distance from the base to the opposite side.
- P is the perimeter.



### AREA AND PERIMETER OF A TRIANGLE(त्रिभुज का क्षेत्रफल और परिमाण)-

The area of a triangle can be calculated using several different formulas, depending on the information you have.

**Using Base and Height**

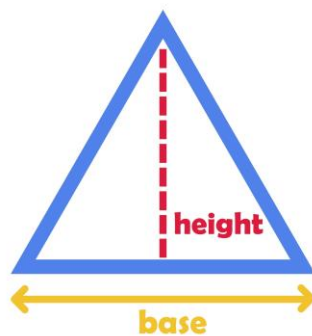
This is the most common formula and is useful when you know the length of one side (the **base**) and the perpendicular distance from that side to the opposite vertex (the **height**).

The area of a triangle  $A = \frac{1}{2} \times \text{breadth} \times \text{height}$ .

The perimeter of a triangle  $P = \text{side} + \text{side} + \text{side}$ .

where:

- A is the area
- b is the length of the base
- h is the height
- p is the perimeter



$$\text{Area of triangle} = \frac{1}{2} \times \text{base} \times \text{height}$$

### AREA AND PERIMETER OF A CIRCLE(वृत्त का क्षेत्रफल और परिमाप)-

The area of a circle is  $A = \pi \cdot r^2$

The perimeter of circle is  $P = 2\pi r$

where:

- A is the area.
- P is the perimeter.
- $\pi$  (pi) is a mathematical constant approximately equal to 3.14159.
- r is the **radius** of the circle, which is the distance from the center of the circle to any point on its edge.
- d is the diameter of circle, which length is double of radius ( $d=2r$  or  $r = \frac{d}{2}$ ).