

ST. THOMAS SCHOOL
WORKSHEET (JANUARY)
SUBJECT: MATHEMATICS
CLASS - VII

LEARN THESE FORMULAS

1. Area of a rectangle = length \times breadth

2. Area of square = (side)²

3. Perimeter of rectangle = 2(length + breadth)

4. Perimeter of square = 4 \times Side

5. Area of rectangular path inside (or outside) a rectangular field = Area of outer rectangle - Area of inner rectangle

6. Area of cross paths = Area of all rectangles making the paths - Area of common rectangle

7. Area of a parallelogram = Base \times Height

8. Area of equilateral triangle = $\frac{1}{2} \times$ Base \times Height

9. Area of equilateral triangle = $\frac{\sqrt{3}}{4} \times$ side²

8. For a circle of radius r units.

- Diameter (d) = 2r
- Circumference (C) = $\pi \times$ diameter = $\pi d = 2\pi r$
- Area of circle = πr^2
- Area of semicircle of radius r = $\frac{1}{2} \pi r^2$
- Area of a quadrant of circle of radius r = $\frac{1}{4} \pi r^2$