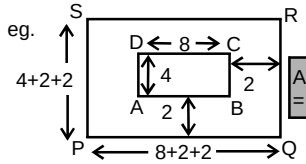
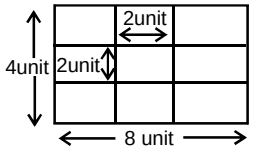
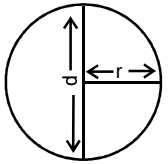
AREA



Area of Path /verandah = Ar. PQRS - Ar. ABCD



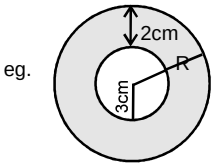
Area of cross road = $(8 \times 2 + 4 \times 2 - 2 \times 2)$ unit^2



Area = πr^2

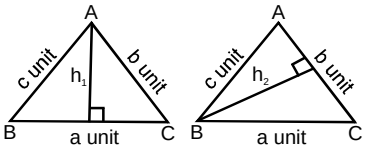
$r = \sqrt{\text{Area} \div \pi}$

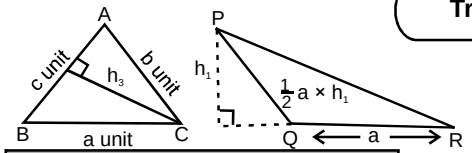
$r = \frac{d}{2}$



R = 3 + 2 cm = 5
r = 3 cm

Area of shaded region = $\pi(5)^2 - \pi(3)^2$

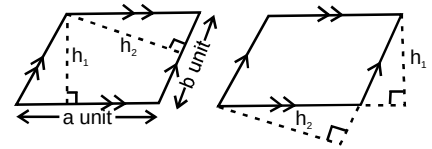




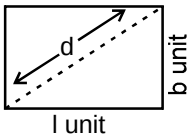
Area = $\frac{1}{2}a \times h_1 = \frac{1}{2}b \times h_2 = \frac{1}{2}c \times h_3$ Sq. units

base = 2Area ÷ altitude
altitude = 2Area ÷ base

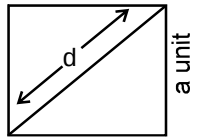
Area of Equilateral $\Delta = \frac{\sqrt{3}}{4}(\text{side})^2$



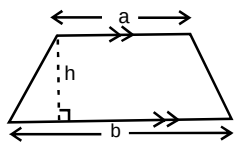
Area = a $\times h_1$ sq. unit = b $\times$ h_2 sq. units
base = Area ÷ corresponding altitude
altitude = Area ÷ corresponding base



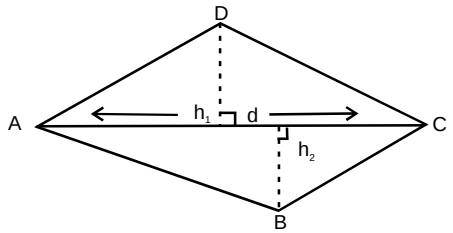
Area = l × b sq. units
length = (Area ÷ breadth) unit
breadth = (Area ÷ length) unit
$d = \sqrt{l^2 + b^2}$



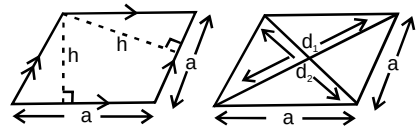
A = a × a sq. unit
Side = $\sqrt{\text{area}}$ unit
d = 2 a



A = $\frac{1}{2}$h × (a +b) sq. units



Area = $\frac{1}{2}$ × diagonal × sum of offsets
= $\frac{1}{2}$ × d × [h_1 + h_2] sq. units



Area = a × h sq. units = $\frac{1}{2}$ $d_1 \times d_2$ sq. units

Area

Measure of Region Enclosed by a closed Rectilinear Figure

Triangle

Circle

Parallelogram

Rectangle

Rhombus :

Square

Trapezium

Quadrilateral :

When to calculate Area :

(a) Painting / white washing
(b) levelling
(c) Ploughing
(d) grazing / watering

1 cm^2 = 100 mm^2
1 m^2 = 10000 cm^2
1 hectare = 10000 m^2