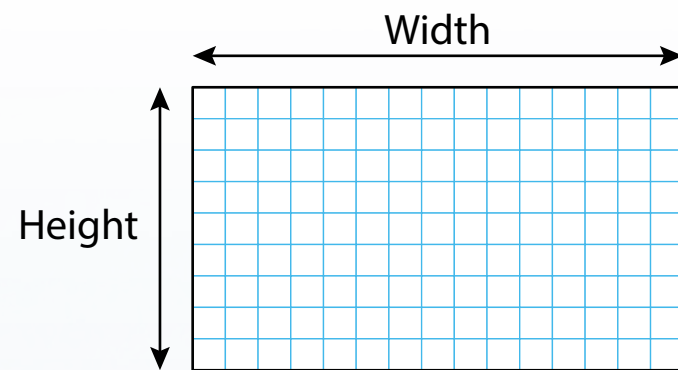
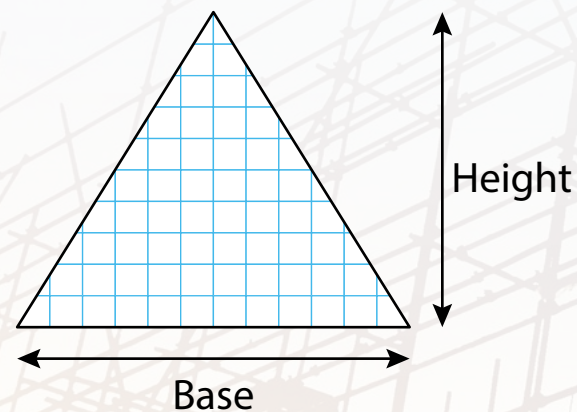


Area formulae for 2D shapes

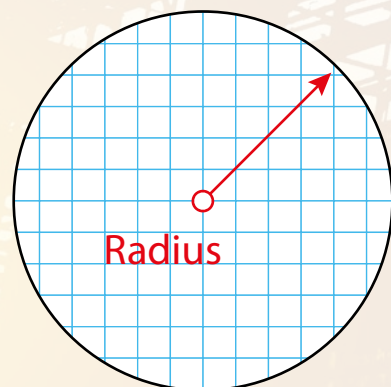
Area of a rectangle = width × height



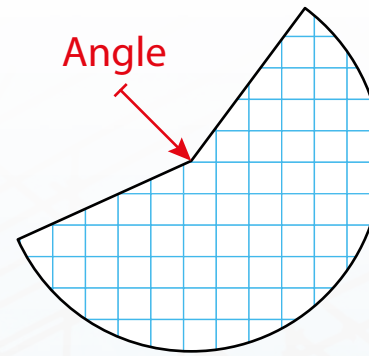
Area of a triangle = $\frac{1}{2}$ base × height



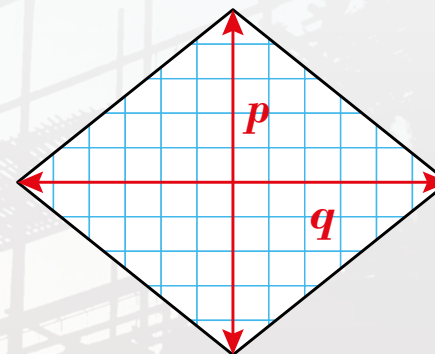
Area of a circle = πr^2



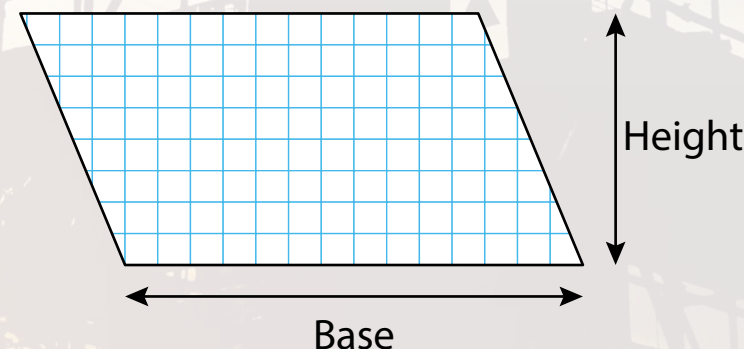
Area of a sector = $\frac{\text{angle}}{360^\circ} \times \pi r^2$



Area of a rhombus = $\frac{1}{2} p q$
(where p and q are the two diagonals)



Area of a parallelogram = base × height



Perimeter formulae of 2D shapes

Regular polygon = side length × number of sides

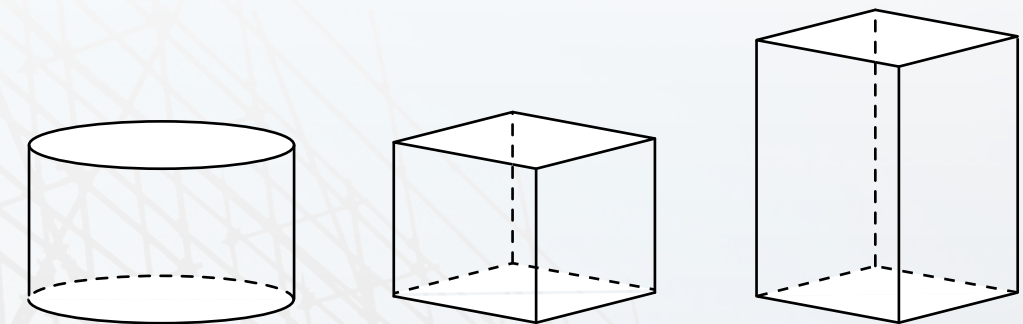
Irregular polygon = sum of all sides

Circle = $2 \pi r$

The volume of 3D shapes

Volume of a prism – a prism is a solid object with identical ends and the same cross section all along its length.

A cube, a cuboid and a cylinder are examples of prisms.



The volume of a prism is calculated by multiplying the cross-sectional area by the length.

Cylinder volume = $\pi r^2 \times \text{length}$

Cuboid volume = base × height × length

Triangular prism volume = $\frac{1}{2}$ base × height × length

Volumes of other 3D shapes

Sphere volume = $V = \frac{4}{3} \times \pi r^3$

Cone volume = $V = \pi r^2 \times \frac{\text{height}}{3}$