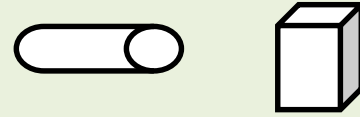


FORMULAE AND TABLES PROVIDED IN THE EXAMINATION

Volume of prism

$V = Ah$ where A is the area of the cross-section and h is the height or length of the prism

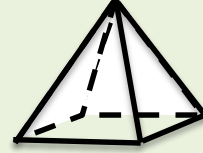
(Volume of a cylinder = $\pi r^2 h$)



Volume of pyramid

$\frac{1}{3}Ah$ where A is the area of the base and h is the height of the pyramid.

(Volume of cone = $\frac{1}{3} \times \pi r^2 h$)

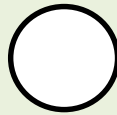


Circumference of a circle

$C = \pi d$ or $2\pi r$ where r is the radius (d is the diameter)

Area of a circle

$A = \pi r^2$



Area of a trapezium

$A = \frac{1}{2}(a+b) \times h$ where a and b are the parallel side and h is the perpendicular distance between the parallel sides.



Root of a quadratic equation

If $ax^2 + bx + c = 0$, then

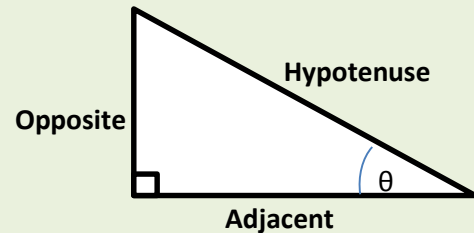
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Trigonometric ratios

$$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$$



Area of triangle

1. $A = \frac{1}{2}bh$, where b is the base length and h is the perpendicular height.

2. $A = \frac{1}{2}ab \sin C$

3. $A = \sqrt{s(s-a)(s-b)(s-c)}$

where $s = \frac{a+b+c}{2}$

Sine Rule

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Cosine Rule

$$a^2 = b^2 + c^2 - 2bc \cos A$$

