IGCSE Mathematics Formula Sheet
Higher Tier
Edexcel

AddvanceMaths.com
The Home of Maths Revision

Arithmetic Series

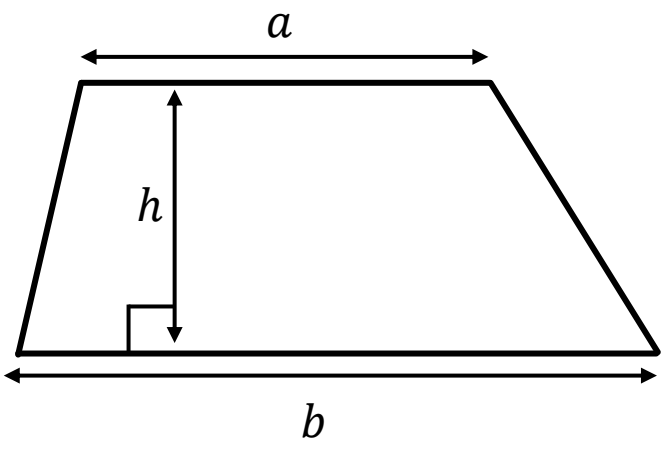
Sum to n terms, $S_n = \frac{n}{2}[2a + (n-1)d]$

The Quadratic Equation

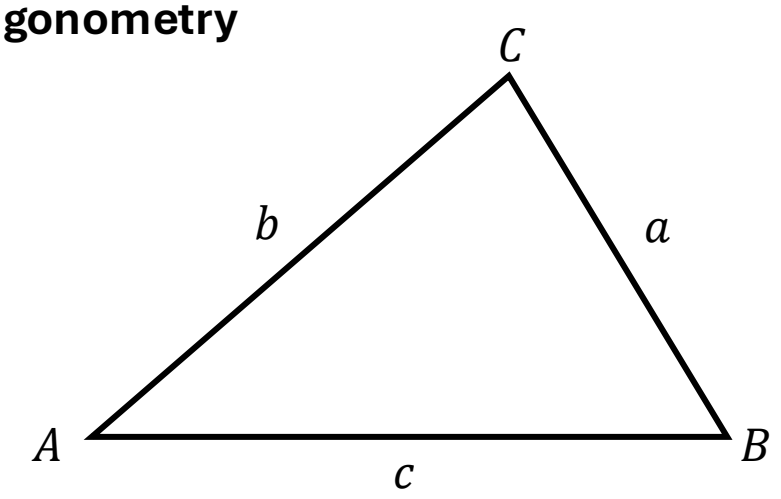
The solutions of $ax^2 + bx + c = 0$ where $a \neq 0$ are given by:

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

Area of Trapezium $= \frac{1}{2}(a+b)h$



Trigonometry



In any triangle ABC

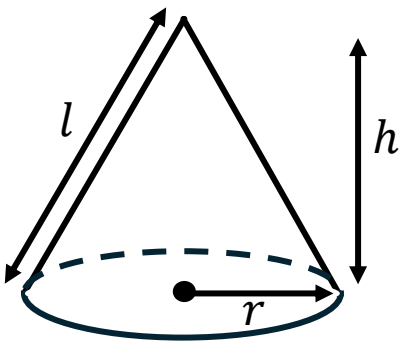
Sine Rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

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

Area of triangle $= \frac{1}{2}ab\sin C$

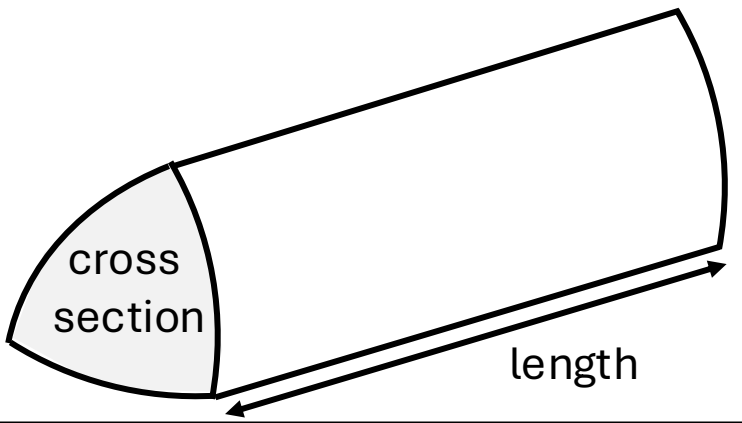
Volume of cone $= \frac{1}{3}\pi r^2 h$

Curved Surface Area of Cone $= \pi r l$



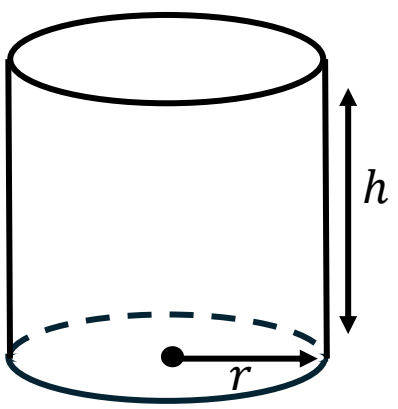
Volume of Prism

$= area\ of\ cross\ section \times length$



Volume of Cylinder $= \pi r^2 h$

Curved Surface Area of Cylinder $= 2\pi r h$



Volume of Sphere $= \frac{4}{3}\pi r^3$

Surface Aea of Sphere $= 4\pi r^2$