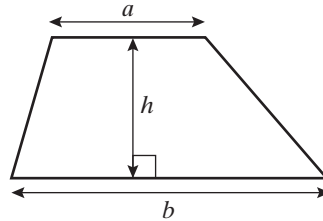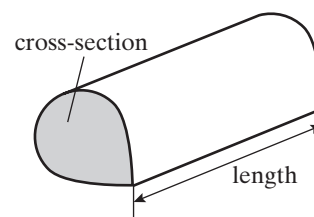# Formulae sheet

For the exact content of the formulae sheet to be provided in the examinations, please check with the examination board.

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

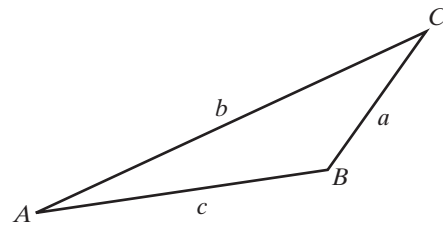**Volume of a prism** $=$ area of cross-section $\times$ length

In any triangle ABC

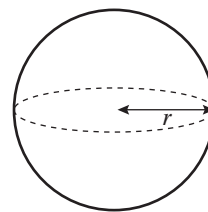**Sine rule** $\dfrac{a}{\sin A} = \dfrac{b}{\sin B} = \dfrac{c}{\sin C}$

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

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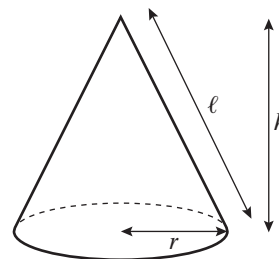

Volume of a sphere $= \frac{4}{3}\pi r^3$

Surface area of a sphere $= 4\pi r^2$

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

Curved surface area of a cone $= \pi r \ell$

The quadratic formula

The solution of $ax^2 + bx + c = 0$, where $a \neq 0$, is given by $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$