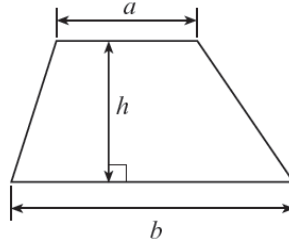
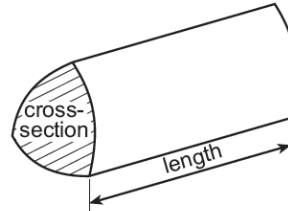


## Formula list

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

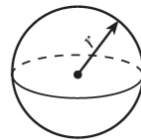


**Volume of a prism**  $= \text{area of cross section} \times \text{length}$



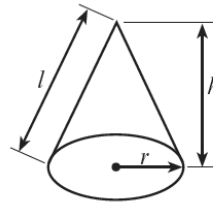
**Volume of a sphere**  $= \frac{4}{3}\pi r^3$

**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**  $= \pi r l$

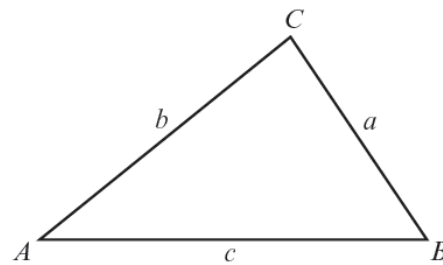


In any triangle  $ABC$ ,

**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**  $= \frac{1}{2}ab \sin C$



## The Quadratic Equation

The solutions of  $ax^2 + bx + c = 0$  where  $a \neq 0$  are given by  $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

## Annual Equivalent Rate (AER)

AER, as a decimal, is calculated using the formula  $\left(1 + \frac{i}{n}\right)^n - 1$ , where  $i$  is the nominal interest rate per annum as a decimal and  $n$  is the number of compounding periods per annum.