

FORMULAE AND TABLES PROVIDED IN THE EXAMINATION

Volume of a prism	$V = Ah$ where A is the area of a cross-section and h is the perpendicular length.
Volume of cylinder	$V = \pi r^2 h$ where r is the radius of the base and h is the perpendicular height.
Volume of a right pyramid	$V = \frac{1}{3} Ah$ where A is the area of the base and h is the perpendicular height.
Circumference	$C = 2\pi r$ where r is the radius of the circle.
Area of circle	$A = \pi r^2$ where r is the radius of the circle.
Area of trapezium	$A = \frac{1}{2}(a + b)h$ where a and b are the lengths of the parallel sides and h is the perpendicular distance between the parallel sides.
Roots of quadratic equations	If $ax^2 + bx + c = 0$, then $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Trigonometric ratios	$\sin \theta = \frac{\text{opposite side}}{\text{hypotenuse}}$ $\cos \theta = \frac{\text{adjacent side}}{\text{hypotenuse}}$ $\tan \theta = \frac{\text{opposite side}}{\text{adjacent side}}$
Area of triangle	Area of $\Delta = \frac{1}{2}bh$ where b is the length of the base and h is the perpendicular height. Area of $\Delta ABC = \frac{1}{2}ab \sin C$ Area of $\Delta ABC = \sqrt{s(s-a)(s-b)(s-c)}$ where $s = \frac{a+b+c}{2}$
Sine rule	$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$
Cosine rule	$a^2 = b^2 + c^2 - 2bc \cos A$

