

OPERATION	FORMULA NAME	FORMULA
$\frac{1}{7}$ FMLA	Sum of geometric progression	$S = \frac{a(r^n - 1)}{r - 1}$
$\frac{1}{8}$ FMLA	Sum of squares	$S = \frac{1}{6} n(n+1)(2n+1)$
$\frac{1}{9}$ FMLA	Sum of cubes	$S = \left\{ \frac{n(n+1)}{2} \right\}^2$
$\frac{2}{0}$ FMLA	Inner product	$\vec{a} \cdot \vec{b} = a_1 b_1 + a_2 b_2$
$\frac{2}{1}$ FMLA	Angle formed by vector	$\cos \theta = \frac{(\vec{a}, \vec{b})}{ \vec{a} \vec{b} } = \frac{a_1 b_1 + a_2 b_2}{\sqrt{a_1^2 + a_2^2} \sqrt{b_1^2 + b_2^2}}$
$\frac{2}{2}$ FMLA	Distance between two points	$\ell = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
$\frac{2}{3}$ FMLA	Distance between point and straight line	$d = \frac{ ax_1 + by_1 + c }{\sqrt{a^2 + b^2}}$
$\frac{2}{4}$ FMLA	Angle of intersect for two straight lines	$\tan \theta = \frac{m_2 - m_1}{1 + m_1 m_2}$
$\frac{2}{5}$ FMLA	Area of a triangle	$S = \frac{1}{2} ah$
$\frac{2}{6}$ FMLA	Area of a rectangle	$S = ab$
$\frac{2}{7}$ FMLA	Area of a parallelogram (1)	$S = ah$
$\frac{2}{8}$ FMLA	Area of a parallelogram (2)	$S = ab \sin \alpha$
$\frac{2}{9}$ FMLA	Area of a trapezoid	$S = \frac{1}{2} (a + b) h$
$\frac{3}{0}$ FMLA	Area of a circle	$S = \pi r^2$
$\frac{3}{1}$ FMLA	Area of a sector (1)	$S = \frac{1}{2} r \ell$
$\frac{3}{2}$ FMLA	Area of a sector (2)	$S = \frac{\pi r^2 \theta}{360}$
$\frac{3}{3}$ FMLA	Area of an ellipse	$S = \pi ab$
$\frac{3}{4}$ FMLA	Volume of a sphere	$V = \frac{4}{3} \pi r^3$
$\frac{3}{5}$ FMLA	Surface area of a sphere	$S = 4 \pi r^2$

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$\frac{3}{6}$ FMLA	Volume of a circular cylinder	$V = \pi r^2 h$
$\frac{3}{7}$ FMLA	Lateral area of a circular cylinder	$S_0 = 2 \pi r h$
$\frac{3}{8}$ FMLA	Volume of a pyramid	$V = \frac{1}{3} A h$
$\frac{3}{9}$ FMLA	Volume of a circular cone	$V = \frac{1}{3} \pi r^2 h$
$\frac{4}{0}$ FMLA	Lateral area of a circular cone	$S_0 = \pi r \ell$

PHYSICS

$\frac{4}{1}$ FMLA	Acceleration	$a = \frac{v_2 - v_1}{t_2 - t_1}$
$\frac{4}{2}$ FMLA	Distance of advance	$S = v_0 t + \frac{1}{2} a t^2$
$\frac{4}{3}$ FMLA	Distance of drop	$S = v_0 t + \frac{1}{2} g t^2$
$\frac{4}{4}$ FMLA	Law of universal gravitation	$F = G \frac{Mm}{r^2}$
$\frac{4}{5}$ FMLA	Cycle of circular motion (1)	$T = \frac{2\pi}{\omega}$
$\frac{4}{6}$ FMLA	Cycle of circular motion (2)	$T = \frac{2\pi r}{v}$
$\frac{4}{7}$ FMLA	Cycle of circular motion (3)	$T = \frac{1}{f}$
$\frac{4}{8}$ FMLA	Simple harmonic motion (1)	$x = r \sin \theta$
$\frac{4}{9}$ FMLA	Simple harmonic motion (2)	$x = r \sin \omega t$
$\frac{5}{0}$ FMLA	Cycle of spring pendulum	$T = 2\pi \sqrt{\frac{m}{k}}$
$\frac{5}{1}$ FMLA	Simple pendulum (1)	$F = -mg \sin \theta$
$\frac{5}{2}$ FMLA	Simple pendulum (2)	$F = -\frac{mg}{\ell} x$
$\frac{5}{3}$ FMLA	Cycle of simple pendulum	$T = 2\pi \sqrt{\frac{\ell}{g}}$