

Mathematics Formula Sheets for End-of-Course Exams

Use at least two decimal place values when approximating square roots or trigonometric ratios.

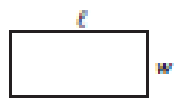
Description	Formula	Variables
Arc Length	$L = \frac{m\widehat{BC}}{360} \pi d$	L : Arc Length B, C : endpoints of arc d : diameter of the circle m : the measure of
Area of Sector	$A = \frac{m\widehat{BC}}{360} \pi r^2$	A : Area of Sector B, C : endpoints of intercepted arc r : radius of the circle m : the measure of
Cylinder	$SA = 2\pi r^2 + 2\pi rh$	SA : Surface Area r : radius of the base h : height
	$V = \pi r^2 h$	V : Volume r : radius of the base h : height
Cone	$SA = \pi r^2 + \pi rl$	SA : Surface Area r : radius of the base l : slant height
	$V = \frac{1}{3} Bh$ or $V = \frac{1}{3} \pi r^2 h$	V : Volume r : radius of the base h : height B : area of the base
Prism	$V = Bh$	V : Volume B : area of the base H : height
	$SA = 2B + Ph$ or $SA = 2B + L$	SA : Surface Area B : area of the base P : Perimeter of the base h : height L : lateral surface area
Pyramid	$V = \frac{1}{3} Bh$	V : Volume B : area of the base h : height
Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	x : solution a, b, c : coefficients
Sphere	$V = \frac{4}{3} \pi r^3$	V : Volume r : radius
	$SA = 4\pi r^2$	SA : Surface Area r : radius

Reference Information



$$A = \pi r^2$$

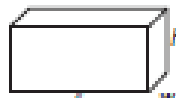
$$C = 2\pi r$$



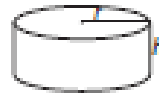
$$A = \ell w$$



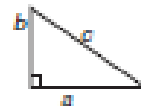
$$A = \frac{1}{2}bh$$



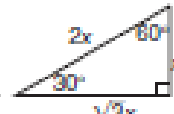
$$V = \ell wh$$



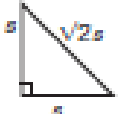
$$V = \pi r^2 h$$



$$c^2 = a^2 + b^2$$



Special Right Triangles



The number of degrees of an arc in a circle is 360.

The measure in degrees of a straight angle is 180.

The sum of the measures in degrees of angles of a triangle is 180.