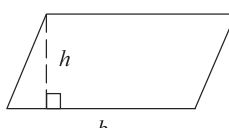
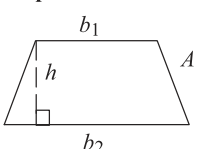
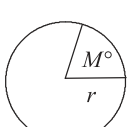
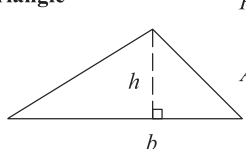
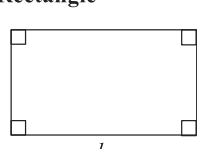
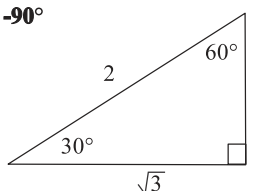
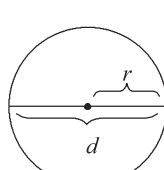
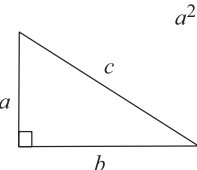
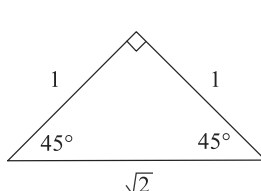
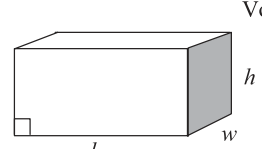
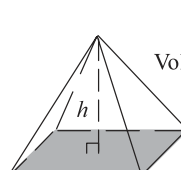
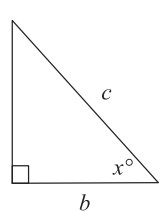
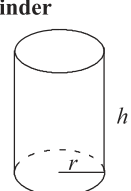
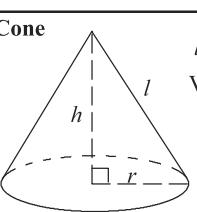
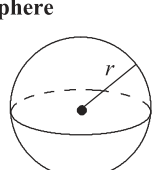


# PART II End-of-Course Mathematics Reference Sheet

## End-of-Course Mathematics Reference Sheet

<p><b>Parallelogram</b></p>  <p><math>P =</math> sum of all sides <math>A = bh</math></p>	<p><b>Trapezoid</b></p>  <p><math>A = \frac{h(b_1 + b_2)}{2}</math></p>	<p><b>Arc and Sector</b></p>  <p>Arc Length = <math>\left(\frac{M}{360}\right) \times 2\pi r</math> Sector area = <math>\left(\frac{M}{360}\right) \times \pi r^2</math></p>
<p><b>Triangle</b></p>  <p><math>P =</math> sum of all sides <math>A = \frac{bh}{2}</math></p>	<p><b>Rectangle</b></p>  <p><math>P = 2l + 2w</math> <math>A = lw</math></p>	<p><b>30° -60° -90°</b></p> 
<p><b>Circle</b></p>  <p><math>C = 2\pi r</math> <math>C = \pi d</math> <math>A = \pi r^2</math> <math>\pi \approx 3.14</math></p>	<p><b>Pythagorean Theorem</b></p>  <p><math>a^2 + b^2 = c^2</math></p>	<p><b>45° -45° -90°</b></p> 
<p><b>Rectangular Solid</b></p>  <p>Volume = <math>lwh</math> Surface area = <math>2lw + 2lh + 2wh</math></p>	<p><b>Pyramid</b></p>  <p><math>B =</math> area of base (shaded) Volume = <math>\frac{Bh}{3}</math></p>	<p><b>Trigonometric Ratios</b></p>  <p><math>\sin x^\circ = \frac{a}{c}</math> <math>\cos x^\circ = \frac{b}{c}</math> <math>\tan x^\circ = \frac{a}{b}</math></p>
<p><b>Cylinder</b></p>  <p>Volume = <math>\pi r^2 h</math> Surface area = <math>2\pi r h + 2\pi r^2</math></p>	<p><b>Cone</b></p>  <p><math>l =</math> slant height Volume = <math>\frac{\pi r^2 h}{3}</math> Surface area = <math>\pi r l + \pi r^2</math></p>	<p><b>Sphere</b></p>  <p>Volume = <math>\frac{4\pi r^3}{3}</math> Surface area = <math>4\pi r^2</math></p>

Miscellaneous Formulas	Area of an equilateral triangle	$A = \frac{s^2\sqrt{3}}{4}$ $s =$ length of a side
	Distance	rate $\times$ time
	Interest	principal $\times$ rate $\times$ time in years
	Sum of the angles of a polygon having $n$ sides	$(n - 2)180^\circ$
	Distance between points on a coordinate plane	$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
	Midpoint	$\left(\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2}\right)$
	Slope of a nonvertical line (where $x_2 \neq x_1$ )	$m = \frac{y_2 - y_1}{x_2 - x_1}$
	Slope intercept (where $m =$ slope, $b =$ intercept)	$y = mx + b$
	Last term of an arithmetic series	$a_n = a + (n - 1)d$
	Last term of a geometric series (where $n \geq 1$ )	$a_n = ar^{n-1}$
	Quadratic formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
	Area of a square	$A = s^2$
	Volume of a cube	$V = s^3$
Area of a regular polygon	$A = \frac{1}{2}ap$ $a =$ apothem, $p =$ perimeter	