Algebra 1 End-of-Course and Geometry End-of-Course Assessments Reference Sheet

Area		KEY	
Parallelogram	A = bh	b = base A = area	
	1	h = height B = area of base	
Triangle	$A = \frac{1}{2}bh$	w = width $C = $ circumference	
		d = diameter $V = volume$	
Trapezoid	$A = \frac{1}{2}h(b_1 + b_2)$	r = radius P = perimeter	
114002014	$2^{n}(c_1 + c_2)$	ℓ = slant height of base	
		a = apothem S.A. = surface area	
Circle	$A = \pi r^2$	Use 3.14 or $\frac{22}{7}$ for π .	
Regular Polygon	$A = \frac{1}{2}aP$	Circumference	
		$C = \pi d$ or $C = 2\pi r$	

Volume/Capacity		acity	Total Surface Area		
	Rectangular Prism	V = bwh or V = Bh	S.A. = 2bh + 2bw + 2hw or S.A. = Ph + 2B		
	Right Circular Cylinder	$V = \pi r^2 h \text{ or}$ V = Bh	$S.A. = 2\pi rh + 2\pi r^2 \text{ or}$ $S.A. = 2\pi rh + 2B$		
\bigcirc	Right Square Pyramid	$V = \frac{1}{3}Bh$	$S.A. = \frac{1}{2}P\ell + B$		
\land	Right Circular Cone	$V = \frac{1}{3}\pi r^2 h \text{ or}$ $V = \frac{1}{3}Bh$	$S.A. = \frac{1}{2} (2\pi r)\ell + B$		
0	Sphere	$V = \frac{4}{3}\pi r^3$	$S.A. = 4\pi r^2$		
Sum of the measures of the interior angles of a polygon = $180(n-2)$					
Measure of an interior angle of a regular polygon $= \frac{180 (n-2)}{n}$ where:					

n represents the number of sides

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Slope formula

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

where m = slope and (x_1, y_1) and (x_2, y_2) are points on the line

Slope-intercept form of a linear equation

$$y = mx + b$$

where m = slope and b = y-intercept

Point-slope form of a linear equation

 $y - y_1 = m(x - x_1)$

where m = slope and (x_1, y_1) is a point on the line

$$P_1(x_1, y_1)$$
 and $P_2(x_2, y_2)$

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

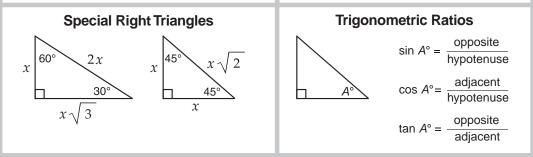
Midpoint between two points

$$P_1(x_1, y_1)$$
 and $P_2(x_2, y_2)$
 $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$

Quadratic formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

where *a*, *b*, and *c* are coefficients in an equation of the form $ax^2 + bx + c = 0$



Conversions				
1 yard = 3 feet 1 mile = 1,760 yards = 5,280 feet 1 acre = 43,560 square feet 1 hour = 60 minutes 1 minute = 60 seconds	1 cup = 8 fluid ounces 1 pint = 2 cups 1 quart = 2 pints 1 gallon = 4 quarts 1 pound = 16 ounces 1 ton = 2,000 pounds			
1 meter = 100 centimeters = 1000 millimeters 1 kilometer = 1000 meters 1 liter = 1000 milliliters = 1000 cubic centimeters 1 gram = 1000 milligrams 1 kilogram = 1000 grams				