B.E.S.T. Geometry EOC Mathematics Reference Sheet

Customary Conversions

1 foot = 12 inches
1 yard = 3 feet
1 mile = 5,280 feet
1 mile = 1,760 yards

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

Metric Conversions

1 meter = 100 centimeters
1 meter = 1000 millimeters
1 kilometer = 1000 meters

1 liter = 1000 milliliters

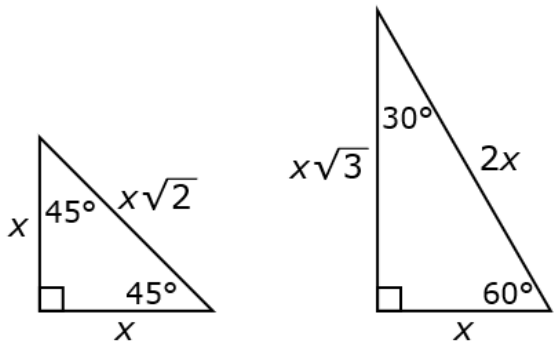
1 gram = 1000 milligrams
1 kilogram = 1000 grams

Time Conversions

1 minute = 60 seconds
1 hour = 60 minutes
1 day = 24 hours
1 year = 365 days
1 year = 52 weeks

Distance Formula	Midpoint Formula	Slope Formula
$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$	$(x_M, y_M) = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$	$m = \frac{y_2 - y_1}{x_2 - x_1}$

Special Right Triangles



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Formulas

Parallelogram	$A = bh$
Trapezoid	$A = \frac{1}{2}h(b_1 + b_2)$
Circle	$C = 2\pi r$ or $C = \pi d$ $A = \pi r^2$
Regular Polygon	$A = \frac{1}{2}Pa$
Prism/Cylinder	$SA = 2B + Ph$ $V = Bh$
Cone	$SA = B + \pi r h_s$ or $SA = B + \pi r l$ $V = \frac{1}{3}Bh$
Regular Pyramid	$SA = B + \frac{1}{2}Ph_s$ or $SA = B + \frac{1}{2}Pl$ $V = \frac{1}{3}Bh$
Sphere	$SA = 4\pi r^2$ $V = \frac{4}{3}\pi r^3$

Key	
P = perimeter	A = area
a = apothem	C = circumference
h = height	SA = surface area
r = radius	V = volume
h_s = slant height	
l = slant height	
b = base	
d = diameter	
B = area of base	

Trigonometric Ratios		
$\sin\theta = \frac{opposite}{hypotenuse}$	$\cos\theta = \frac{adjacent}{hypotenuse}$	$\tan\theta = \frac{opposite}{adjacent}$