

## Mathematics Chart

LENGTH	
Metric	Customary
1 meter (m) = 100 centimeters (cm)	1 foot (ft) = 12 inches (in.)
1 centimeter (cm) = 10 millimeters (mm)	1 yard (yd) = 3 feet (ft)
1 kilometer (km) = 1000 meters (m)	1 yard (yd) = 36 inches (in.)
1 meter (m) = 1000 millimeters (mm)	1 mile (mi) = 5280 feet (ft)
Metric/Customary	
2.54 centimeters (cm) = 1 inch (in)	
1 meter (m) = 1.09 yards (yd)	
1.61 kilometers (km) = 1 mile (mi)	
CAPACITY AND VOLUME	
Metric	Customary
1 liter (L) = 1000 milliliters (mL)	1 cup (c) = 8 fluid ounces (fl. oz.)
1 cubic centimeter (cc or cm <sup>3</sup> ) = 1 milliliter (mL)	1 pint (pt) = 2 cups (c)
	1 quart (qt) = 2 pints (pt)
	1 gallon (gal) = 128 fluid ounces (fl. oz.)
	1 gallon (gal) = 4 quarts (qt)
Metric/Customary	
3.785 liters (L) = 1 gallon (gal)	
MASS AND WEIGHT	
Metric	Customary
1 kilogram (kg) = 1000 grams (g)	1 pound (lb) = 16 ounces (oz)
1 gram (g) = 1000 milligrams (mg)	1 ton (T) = 2000 pounds (lb)
Metric/Customary	
1 kilograms (kg) = 2.205 pounds (lb)	
TIME	
1 minute (min) = 60 seconds (sec)	
1 hour (hr) = 60 minutes (min)	
1 day = 24 hours (hr)	
1 week = 7 days	
1 year (yr) = 52 weeks	
1 year (yr) = 12 months (mo)	
1 year (yr) = 365 days	

# Formula Chart Mathematics Chart

OTHER		
<b>Simple Interest Formula</b>		$I = prt$
<b>Perimeter</b>	Triangle	$P = a + b + c$
	Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
<b>Circumference</b>	Circle	$C = 2\pi r$ or $C = \pi d$
<b>Area</b>	Rectangle	$A = lw$
	Parallelogram	$A = bh$
	Triangle	$A = \frac{1}{2}bh$
	Trapezoid	$A = \frac{1}{2}(b_1 + b_2)h$
	Circle	$A = \pi r^2$
<b>Volume</b>	Rectangular prism	$V = lwh$
<b>Pythagorean Theorem</b>		$a^2 + b^2 = c^2$
<b>Formulas concerning distance</b>		$D = rt$ $r = \frac{D}{t}$ $t = \frac{D}{r}$
<b>Formulas concerning temperature</b>		$F = \frac{9}{5}C + 32$ $C = \frac{5}{9}(F - 32)$
<b>Variation</b>		<b>Direct:</b> $y = kx$ <b>Inverse:</b> $y = \frac{k}{x}$
<b>Quadratic Formula</b>		$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
<b>Vertex Formula</b>		$\left(-\frac{b}{2a}, f\left(-\frac{b}{2a}\right)\right)$
<b>Slope Formula</b>		$m = \frac{y_2 - y_1}{x_2 - x_1}$
<b>Slope-Intercept Form of an Equation</b>		$y = mx + b$
<b>Point-Slope Form of an Equation</b>		$y - y_1 = m(x - x_1)$
<b>Standard Form of an Equation</b>		$Ax + By = C$