

Formula Chart Mathematics Chart

LENGTH		CAPACITY AND VOLUME	
1 foot (ft) = 12 inches (in.)		1 cup (c) = 8 fluid ounces (fl. oz.)	
1 yard (yd) = 3 feet (ft)		1 pint (pt) = 2 cups (c)	
1 yard (yd) = 36 inches (in.)		1 quart (qt) = 2 pints (pt)	
1 mile (mi) = 5280 feet (ft)		1 gallon (gal) = 128 fluid ounces (fl. oz.)	
2.54 centimeters (cm) = 1 inch (in)		1 gallon (gal) = 4 quarts (qt)	
1 meter (m) = 1.09 yards (yd)		3.785 liters (L) = 1 gallon (gal)	
1.61 kilometers (km) = 1 mile (mi)		1 cubic centimeter (cc or cm ³) = 1 milliliter (mL)	
MASS AND WEIGHT		TIME	
1 pound (lb) = 16 ounces (oz)		1 minute (min) = 60 seconds (sec)	
1 ton (T) = 2000 pounds (lb)		1 hour (hr) = 60 minutes (min)	
1 kilograms (kg) = 2.205 pounds (lb)		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	
METRIC SYSTEM			
1 kilometer (km) = 1000 meters (m)	1 kiloliter (kL) = 1000 liters (L)	1 kilogram (kg) = 1000 grams (g)	
1 hectometer (hm) = 100 meters (m)	1 hectoliter (hL) = 100 liters (L)	1 hectogram (hg) = 100 grams (g)	
1 dekameter (dam) = 10 meters (m)	1 dekaliter (daL) = 10 liters (L)	1 dekagram (dag) = 10 grams (g)	
10 decimeters (dm) = 1 meter (m)	10 deciliters (dL) = 1 liter (L)	10 decigrams (dg) = 1 gram (g)	
100 centimeters (cm) = 1 meter (m)	100 centiliters (cL) = 1 liter (L)	100 centigrams (cg) = 1 gram (g)	
1000 millimeters (mm) = 1 meter (m)	1000 milliliters (mL) = 1 liter (L)	1000 milligrams (mg) = 1 gram (g)	
OTHER FORMULAS			
Temperature	$F = \frac{9}{5}C + 32$ $C = \frac{5}{9}(F - 32)$		
Distance	$D = rt$ $r = \frac{D}{t}$ $t = \frac{D}{r}$		
Simple Interest	$I = prt$		
Pythagorean Theorem	$a^2 + b^2 = c^2$		

OTHER FORMULAS CONTINUED

Variation	Direct: $y = kx$ Inverse: $y = \frac{k}{x}$
Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Vertex Formula	$\left(-\frac{b}{2a}, f\left(-\frac{b}{2a}\right)\right)$
Slope Formula	$m = \frac{y_2 - y_1}{x_2 - x_1}$
Slope-Intercept Form of an Equation	$y = mx + b$
Point-Slope Form of an Equation	$y - y_1 = m(x - x_1)$
Standard Form of an Equation	$Ax + By = C$

GEOMETRY FORMULAS

Perimeter	Triangle	$P = a + b + c$
	Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Circumference	Circle	$C = 2\pi r$ or $C = \pi d$
Area	Rectangle	$A = lw$
	Parallelogram	$A = bh$
	Triangle	$A = \frac{1}{2}bh$
	Trapezoid	$A = \frac{1}{2}(b_1 + b_2)h$
	Circle	$A = \pi r^2$
Volume	Rectangular Prism	$V = lwh$
	Cube	$V = s^3$
	Pyramid	$V = \frac{lwh}{3}$
	Cylinder	$V = \pi r^2 h$
	Cone	$V = \frac{\pi r^2 h}{3}$
	Sphere	$V = \frac{4}{3}\pi r^3$