

# Formulas

Perimeter	square	$P = 4s$
	rectangle	$P = 2\ell + 2w$ or $P = 2(\ell + w)$
Circumference	circle	$C = 2\pi r$ or $C = \pi d$
Area	square	$A = s^2$
	rectangle	$A = \ell w$
	parallelogram	$A = bh$
	triangle	$A = \frac{1}{2}bh$
	trapezoid	$A = \frac{1}{2}h(b_1 + b_2)$
	circle	$A = \pi r^2$
Surface Area	cube	$S = 6s^2$
	rectangular prism	$S = 2\ell w + 2\ell h + 2wh$
	cylinder	$S = 2\pi rh + 2\pi r^2$
Volume	cube	$V = s^3$
	prism	$V = \ell wh$ or $Bh$
	cylinder	$V = \pi r^2 h$ or $Bh$
	pyramid	$V = \frac{1}{3}Bh$
	cone	$V = \frac{1}{3}\pi r^2 h$ or $\frac{1}{3}Bh$
Pythagorean Theorem	right triangle	$a^2 + b^2 = c^2$
Temperature	Fahrenheit to Celsius	$C = \frac{5}{9}(F - 32)$
	Celsius to Fahrenheit	$F = \frac{9}{5}C + 32$

# Measurement Conversions

Length	1 kilometer (km) = 1,000 meters (m)	1 foot (ft) = 12 inches (in.)
	1 meter = 100 centimeters (cm)	1 yard (yd) = 3 feet or 36 inches
	1 centimeter = 10 millimeters (mm)	1 mile (mi) = 1,760 yards or 5,280 feet
Volume and Capacity	1 liter (L) = 1,000 milliliters (mL)	1 cup (c) = 8 fluid ounces (fl oz)
	1 kiloliter (kL) = 1,000 liters	1 pint (pt) = 2 cups
		1 quart (qt) = 2 pints
		1 gallon (gal) = 4 quarts
Weight and Mass	1 kilogram (kg) = 1,000 grams (g)	1 pound (lb) = 16 ounces (oz)
	1 gram = 1,000 milligrams (mg)	1 ton (T) = 2,000 pounds
	1 metric ton = 1,000 kilograms	
Time	1 minute (min) = 60 seconds (s)	1 week (wk) = 7 days
	1 hour (h) = 60 minutes	1 year (yr) = 12 months (mo) or 52 weeks or 365 days
	1 day (d) = 24 hours	1 leap year = 366 days
Metric to Customary	1 meter $\approx$ 39.37 inches	1 kilogram $\approx$ 2.2 pounds
	1 kilometer $\approx$ 0.62 mile	1 gram $\approx$ 0.035 ounce
	1 centimeter $\approx$ 0.39 inch	1 liter $\approx$ 1.057 quarts