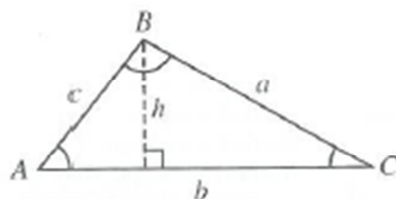


Geometric Formulas

Perimeter and Area of a Triangle, and
Sum of the Measures of the Angles

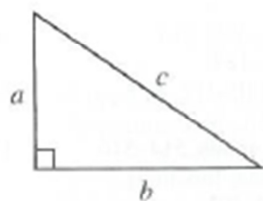


$$P = a + b + c$$

$$A = \frac{1}{2}bh$$

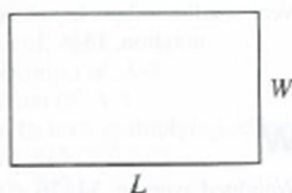
$$A + B + C = 180^\circ$$

Pythagorean Theorem



$$a^2 + b^2 = c^2$$

Perimeter and Area of a Rectangle



$$P = 2L + 2W$$

$$A = LW$$

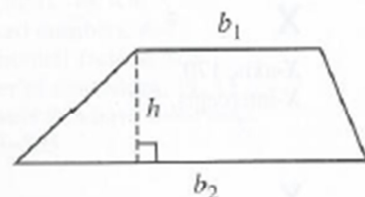
Perimeter and Area of a Square



$$P = 4s$$

$$A = s^2$$

Area of a Trapezoid



$$A = \frac{1}{2}h(b_1 + b_2)$$

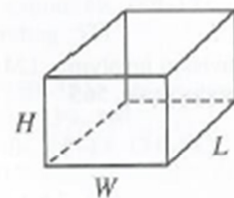
Circumference and Area of a Circle



$$C = 2\pi r$$

$$A = \pi r^2$$

Volume and Surface Area of a Rectangular Solid



$$V = LWH$$

$$SA = 2LW + 2LH + 2WH$$

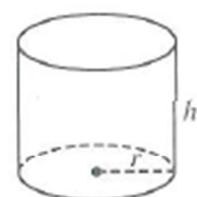
Volume and Surface Area of a Sphere



$$V = \frac{4}{3}\pi r^3$$

$$SA = 4\pi r^2$$

Volume and Surface Area of a Right
Circular Cylinder



$$V = \pi r^2 h$$

$$SA = 2\pi r^2 + 2\pi rh$$

Volume and Surface Area of a
Right Circular Cone



$$V = \frac{1}{3}\pi r^2 h$$

$$SA = \pi r^2 + \pi rl$$

Metric-U.S. Conversion

Length

1 meter = 3.28 feet	1 foot = 0.305 meters
1 meter = 1.094 yards	1 yard = 0.914 meters
1 centimeter = 0.394 inches	1 inch = 2.54 centimeters
1 kilometer = 0.6214 miles	1 mile = 1.6093 kilometers

Weight

1 gram = 0.03527 ounces	1 ounce = 28.35 grams
1 kilogram = 2.205 pounds	1 pound = 0.454 kilograms
1 gram = 0.002205 pounds	1 pound = 454 grams

Volume

1 liter = 1.057 quarts	1 quart = 0.946 liters
1 liter = 0.2642 gallons	1 gallon = 3.785 liters

Temperature

Celsius (C) to Fahrenheit (F)

$$F = \frac{9}{5}C + 32$$

Fahrenheit (F) to Celsius (C)

$$C = \frac{5}{9}(F - 32)$$

U.S. System of Measurement

Length

1 foot = 12 inches
1 yard = 3 feet
1 mile = 5280 feet

Weight

1 pound = 16 ounces
1 ton = 2000 pounds

Volume

1 cup = 8 fluid ounces
1 pint = 2 cups
1 quart = 2 pints
1 gallon = 4 quarts

Metric System of Measurement

Prefix	Meaning
--------	---------

kilo-	1000
hecto-	100
deka-	10
deci-	$\frac{1}{10} = 0.1$
centi-	$\frac{1}{100} = 0.01$
milli-	$\frac{1}{1000} = 0.001$

Length

1 kilometer (km) = 1000 meters (m)
1 hectometer (hm) = 100 m
1 dekameter (dam) = 10 m

Mass

1 kilogram (kg) = 1000 grams (g)
1 hectogram (hg) = 100 g
1 dekagram (dag) = 10 g

Volume

1 kiloliter (kl) = 1000 liters (l)
1 hectoliter (hl) = 100 l
1 dekaliter (dal) = 10 l

1 decimeter (dm) = $\frac{1}{10}$ m = 0.1 m
1 centimeter (cm) = $\frac{1}{100}$ m = 0.001 m
1 millimeter (mm) = $\frac{1}{1000}$ m = 0.001 m

1 decigram (dg) = $\frac{1}{10}$ g = 0.1 g
1 centigram (cg) = $\frac{1}{100}$ g = 0.01 g
1 milligram (mg) = $\frac{1}{1000}$ g = 0.001 g

1 deciliter (dl) = $\frac{1}{10}$ l = 0.1 l
1 centiliter (cl) = $\frac{1}{100}$ l = 0.01 l
1 milliliter (ml) = $\frac{1}{1000}$ l = 0.001 l