

Formula Sheet

Perimeter

$$\text{Triangle: } P = a + b + c$$

$$\text{Rectangle: } P = 2(L + w)$$

$$\text{Square: } P = 4s$$

$$\text{Circle: } C = \pi d, C = 2\pi r$$

Area

$$\text{Triangle: } A = \frac{1}{2}bh$$

$$\text{Rectangle: } A = Lw$$

$$\text{Square: } A = s^2$$

$$\text{Circle: } A = \pi r^2$$

$$\text{Parallelogram: } A = bh$$

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

Miscellaneous

$$\text{Pythagorean Theorem: } a^2 + b^2 = c^2$$

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

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

$$\text{Simple Interest: } I = PRT$$

Conversions

U.S. System:

Length

$$12 \text{ in} = 1 \text{ ft}$$

$$3 \text{ ft} = 1 \text{ yd}$$

$$5280 \text{ ft} = 1 \text{ mi}$$

Mass

$$16 \text{ oz} = 1 \text{ lb}$$

$$2,000 \text{ lb} = 1 \text{ ton}$$

Capacity

$$8 \text{ fl oz} = 1 \text{ c}$$

$$2 \text{ c} = 1 \text{ pt}$$

$$2 \text{ pt} = 1 \text{ qt}$$

$$4 \text{ qt} = 1 \text{ gal}$$

METRIC System:

k	h	da	grams	d	c	m
			liters			
			meters			

Length

$$1 \text{ km} = 1000 \text{ m}$$

$$1 \text{ m} = 100 \text{ cm}$$

$$1 \text{ m} = 1000 \text{ mm}$$

Mass

$$1 \text{ kg} = 1000 \text{ g}$$

$$1 \text{ g} = 1000 \text{ mg}$$

Capacity

$$1 \text{ L} = 1000 \text{ ml}$$

Volume

$$\text{Rectangular Prism: } V = Lwh$$

$$\text{Cube: } V = s^3$$

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

$$\text{Cylinder: } V = \pi r^2h$$

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

$$\text{Square based Pyramid: } V = \frac{1}{3}s^2h$$

Surface Area

$$\text{Rectangular Prism: } SA = 2Lw + 2Lh + 2wh$$

$$\text{Cube: } SA = 6s^2$$

$$\text{Sphere: } SA = 4\pi r^2$$

$$\text{Cylinder: } SA = 2\pi r^2 + 2\pi r h$$

$$\text{Cone: } SA = \pi r^2 + \pi r \underline{h}$$

$$\text{Square based Pyramid: } SA = s^2 + 2s \underline{h}$$