PK-3 Mathematics Reference Sheet

Area
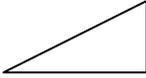
Triangle $\qquad A = \dfrac{1}{2}bh$
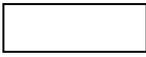
Rectangle $\qquad A = lw$

Trapezoid $\qquad A = \dfrac{1}{2}h(b_1 + b_2)$

Parallelogram $\quad A = bh$
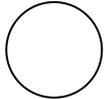
Circle $\qquad A = \pi r^2$

KEY	
b = base	d = diameter
h = height	r = radius
l = length	A = area
w = width	C = circumference
$S.A.$ = surface area	V = volume
	B = area of base

Use 3.14 or $\dfrac{22}{7}$ for π

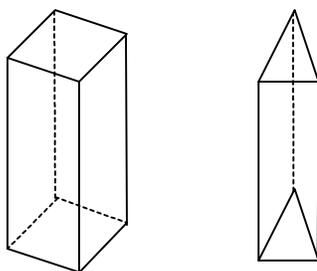**Circumference**
$C = \pi d = 2\pi r$

Surface Area
1. Surface area of a prism or pyramid equals the sum of the areas of all faces.
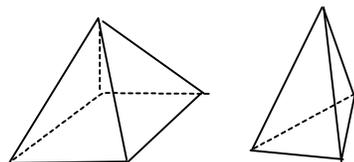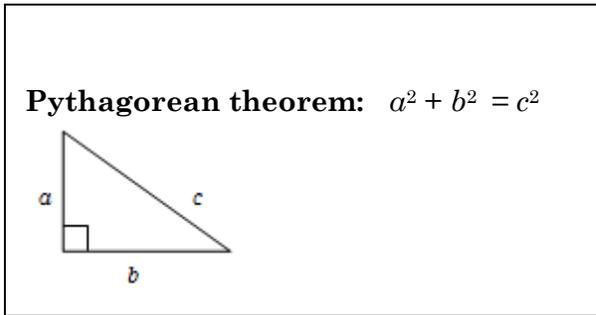
Volume
1. Volume of a triangular or rectangular prism equals the <u>Area of the Base</u> (B) times the height (h).
   $V = Bh$

2. Volume of a pyramid equals $\frac{1}{3}$ times the <u>Area of the Base</u> (B) times the height (h).

$$V = \frac{1}{3}Bh$$

Pythagorean theorem: $a^2 + b^2 = c^2$

Conversions

1 yard = 3 feet = 36 inches

1 mile = 1,760 yards = 5,280 feet

1 acre = 43,560 square feet

1 hour = 60 minutes

1 minute = 60 seconds

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 pound = 16 ounces

1 ton = 2,000 pounds

1 liter = 1000 milliliters = 1000 cubic centimeters

1 meter = 100 centimeters = 1000 millimeters

1 kilometer = 1000 meters

1 gram = 1000 milligrams

1 kilogram = 1000 grams

Metric numbers with four digits are presented without a comma (e.g., 9960 kilometers). For metric numbers greater than four digits, a space is used instead of a comma (e.g., 12 500 liters).