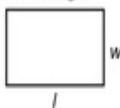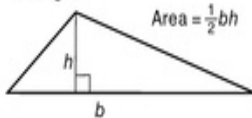# Pre-Algebra
Reference Sheet

Circle

Area $= \pi r^2$
Circumference $= 2\pi r$
Circumference $= \pi d$

Rectangle
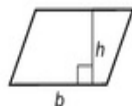
Area $= lw$
Perimeter $= 2l + 2w$

Triangle
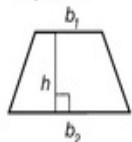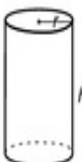
Area $= \frac{1}{2}bh$

Parallelogram

Area $= bh$

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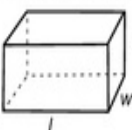
Area $= \frac{1}{2}h(b_1 + b_2)$

Cylinder

Volume $= \pi r^2 h$
Surface Area $= 2\pi r^2 + 2\pi rh$

Cube

Volume $= s^3$
Surface Area $= 6s^2$

Rectangular Prism

Volume $= lwh$
Surface Area $= 2wl + 2lh + 2wh$

Definitions

MEAN:	The sum of a set of numbers divided by the number of elements in the set.
MEDIAN:	The middle number or average of the two middle numbers in a collection of data when the data are arranged in order.
MODE:	The number or numbers that occur most often in a collection of data.
RANGE:	The difference between the greatest and the least numbers in a collection of data.
REFLECTION OR FLIP:	A mirror image of a figure across a line of symmetry.
TRANSLATION OR SLIDE:	A change in position of a figure. All points in the figure move in the same direction for the same distance.
ROTATION OR TURN:	Turning a figure clockwise or counterclockwise about a point.

DISTANCE TRAVELED: distance $=$ rate $\times$ time

Customary Conversions

8 ounces $=$ 1 cup
2 cups $=$ 1 pint
2 pints $=$ 1 quart
4 quarts $=$ 1 gallon
8 pints $=$ 1 gallon
3 teaspoons $=$ 1 tablespoon
16 tablespoons $=$ 1 cup
16 ounces $=$ 1 pint
16 ounces $=$ 1 pound
5280 feet $=$ 1 mile

Metric Conversions

kilo-	hecto-	deka-	UNIT	deci-	centi-	milli-
k	h	da	meter (m) liter (l) gram (g)	d	c	m