Name: _____ Date: _____

Literal Equations

Rewrite each equation in terms of the indicated (Letter).

1) $P = IRT$ **(T)**

2) $P = 2(L + W)$ **(W)**

3) $y = 5x - 6$ **(x)**

4) $2x - 3y = 8$ **(y)**

5) $\dfrac{x + y}{3} = 5$ **(x)**

6) $y = mx + b$ **(b)**

7) $ax + by = c$ **(y)**

8) $A = (½)h(b + c)$ **(b)**

9) $V = LWH$ **(L)**

10) $A = 4\pi r^2$ **(r)**

Conversions Factors			
1 hr = 60 min	1 min = 60 sec	1 ton = 2000 lbs	7 days = 1 week
24 hrs = 1 day	1 kg = 2.2 lbs	1 gal = 3.79 L	1 Liter = 1000 cubic cm
1 mi = 5,280 ft	1 kg = 1000 g	1 lb = 16 oz	20 drops = 1 mL
365 days = 1 yr	1 mile = 8 furlongs	2.54 cm = 1 in	1 L = 1000 mL
0.621 mi = 1.00 km	1 yd = 36 inches	1 cc is 1 cm³	1 mL = 1 cm³

Solve each problem using dimensional analysis. Every number must have a unit. Plans and work must be shown. Conversion factors are given above.

11) If you are in a car going 110 km/hr, home many miles per minute are you going?

12) Gold costs $1340 per ounce. Determine how many grams you can purchase for $17,950.

13) If you have a pool that holds 18,000 gallons of water, how many cubic centimeters of water are there in the pool?

14) Mt. Kilimanjaro is about 16,100 feet tall. How many decameters is that?