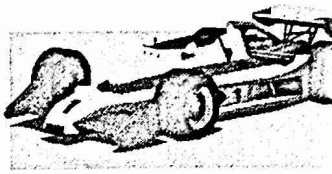
Name: _____ Date: _____

PRACTICE: Solving for Missing Variable

One useful formula from science says that distance = rate X time. We usually write d = rt to save space.



Use the formula d=rt to answer the following question by solving for the **specified variable** first.

Leslie is driving her old Volkswagen Bug to college and she wants to get there in 3 hours to meet her roommate. If her college is 200 miles from home how **fast (r)** will she have to drive?

Practice Problems:

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

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

$\frac{P}{IR} = T$

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

$\frac{P}{2} - L$

3) y = 5x - 10 ***(x)***

$\frac{y+10}{5} = x$

$\frac{1}{5}y + 2 = x$

4) 2x - 3y = 9 ***(y)***

$-3y = -2x + 9$

$\frac{-3}{-3}$

$y = \frac{2}{3}x - 3$

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

$x + y = 15$

$x = 15 - y$

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

$y - mx = b$

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

$\frac{c - ax}{b} = y$

8) V = LWH ***(L)***

$\frac{V}{WH} = L$

9) ax + by = c ***(x)***

$x = \frac{c - by}{a}$

10) 2x - 3y = 8 ***(x)***

$2x = 3y + 8$

$\frac{2}{2}$

$x = \frac{3}{2}y + 4$

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

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

$$\frac{P-2L}{2} = W$$

2) $S = 2\pi rh$ ***(h)***

$$\frac{S}{2\pi r} = h$$

3) $E = mc^2$ ***(m)***

$$\frac{E}{c^2} = m$$

4) $-20x - 5y = 30$ ***(y)***

$$\frac{-5y = 20x + 30}{-5}$$

$$y = -4x - 6$$

5) $A = \frac{bh}{2}$ **(b)**

$$\frac{2A}{h} = b$$

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

$$\frac{y-b}{m} = x$$

7) $V = \frac{1}{3}Bh$ ***(h)***

$$\frac{3V}{B} = h$$

8) $A = \frac{a+b+c}{3}$ ***(c)***

$$3A - a - b = C$$

9) $m = \frac{2E}{v^2}$ **(E)**

$$\frac{v^2 m}{2} = E$$

10) $6x + 3y = -15$ ***(y)***

$$\frac{3y = -6x - 15}{3}$$

$$y = -2x -$$

Tony Wed 2nd 1112

Thurs 1112