

## Day 6 - Isolating a Variable: Simple Equations - Practice

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

1.  $E = mc^2$  for (m)

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

2.  $A = \frac{bh}{2}$  for (b)

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

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

3.  $S = \pi r h$  for (h)

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

4.  $\frac{1}{2}mv^2 = \frac{2E}{v^2}$  for (E)

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

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

5.  $4x - 3y = 15$  for (y)

$$-3y = -4x + 15$$

$$y = 2x - 5$$

6.  $-9x - 3y = 6$  for (y)

$$-3y = 9x + 6$$

$$y = -3x - 2$$

7.  $P = 2l + 2W$  for (W)

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

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

8.  $-15x + 5y = -25$  for (y)

$$\frac{5y}{5} = \frac{15x - 25}{5}$$

$$y = 3x - 5$$

9.  $V = \frac{1}{3}Bh$  for (h)

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

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

10.  $V = \pi r^2 h$  for (h)

$$h = \frac{V}{\pi r^2}$$

11.  $A = h(b + c)$  for (b)

$$\frac{A}{h} = b + c$$

$$b = \frac{A}{h} - c$$

12.  $s = \frac{w - 10e}{m}$  for (w)

$$ms = w - 10e$$

$$w = ms + 10e$$