

Lesson 1-2 Literal Equations 2

- I can solve equations for a specific variable

Solve the Following:

1. $T = m - n$ Solve for n

$$n + T = m$$

$$n = m - T$$

2. $V = lwh$ Solve for w

$$w = \frac{V}{lh}$$

3. $ax + by = 2c$ Solve for y

$$by = 2c - ax$$

$$y = \frac{2c - ax}{b}$$

4. $A = p(1 + rt)$ Solve for t

$$\frac{A}{p} = 1 + rt$$

$$\frac{A}{p} - 1 = rt$$

$$\frac{\frac{A}{p} - 1}{r} = t$$

5. $C = \frac{5}{9}(F - 32)$ Solve for F

$$\frac{9}{5}C = F - 32$$

$$\frac{9}{5}C + 32 = F$$

6. $B = \frac{703w}{h^2}$ Solve for w

$$Bh^2 = 703w$$

$$\frac{Bh^2}{703} = w$$

7. $F = \frac{gm_1m_2}{d^2}$ Solve for g

$$Fd^2 = gm_1m_2$$

$$\frac{Fd^2}{m_1m_2} = g$$

8. $3x - 4y = 7$ Solve for x

$$3x = 7 + 4y$$

$$x = \frac{7 + 4y}{3}$$

9. $15y + 1 = x$ Solve for y .

$$15y = x - 1$$

$$y = \frac{x - 1}{15}$$

11. $\frac{3}{5}y + a = b$ Solve for y

$$\frac{3}{5}y = b - a$$

$$y = \frac{5}{3}(b - a)$$

13. $\left(\frac{by + 2}{3} = c\right)$ Solve for y

$$by + 2 = 3c$$

$$by = 3c - 2$$

$$y = \frac{3c - 2}{b}$$

15. $km + 5x = 6y$ Solve for m

$$km = 6y - 5x$$

$$m = \frac{6y - 5x}{k}$$

17. $\left(\frac{3ax - n}{5} = -4\right)$ Solve for x

$$3ax - n = -20$$

$$3ax = -20 + n$$

$$x = \frac{-20 + n}{3a}$$

10. $ex - 2y = 3$ Solve for x

$$ex = 3 + 2y$$

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

12. $y = mx + b$ Solve for m

$$y - b = mx$$

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

14. $\left(P = \frac{E^2}{R}\right)$ Solve for R

$$RP = E^2$$

$$R = \frac{E^2}{P}$$

16. $p(t + 1) = -2$ Solve for t

$$t + 1 = \frac{-2}{p}$$

$$t = \frac{-2}{p} - 1$$

18. $h = vt - 16t^2$ Solve for v

$$h + 16t^2 = vt$$

$$\frac{h + 16t^2}{t} = v$$

$$\frac{h}{t} + 16t = v$$

$$\frac{16t^2}{t} = 16t$$