



① Solve for  $m$ . Then find the value of  $m$  for each value of  $n$ .

$$2) 3m - 9n = 24$$

$$n = -1, 1, 3$$

$$\textcircled{1} \quad \begin{array}{r} 3m - 9n = 24 \\ \quad +9n \quad +9n \end{array}$$

$$\frac{3m}{3} = \frac{9n + 24}{3}$$

$$m = 3n + 8$$

$$\textcircled{2} \quad \begin{array}{l} m = 3n + 8 \\ m = 3(-1) + 8 \end{array}$$

$$m = -3 + 8$$

$$m = 5$$

$$\textcircled{3} \quad m = 3(1) + 8$$

$$m = 3 + 8$$

$$m = 11$$

$$\textcircled{4} \quad m = 3(3) + 8$$

$$m = 9 + 8$$

$$m = 17$$

Solve for  $x$ .

$$\textcircled{1} \quad \left[ m = \frac{x + n}{p} \right]$$

$$mp = \begin{array}{r} x + n \\ -n \quad -n \end{array}$$

$$mp - n = x$$

$$x = mp - n$$

Solve for  $x$ .

$$12) d = f + fx$$

$$\frac{d-f}{f} = \frac{fx}{f}$$

$$\frac{d}{f} - 1 = x$$

$$x = \frac{d}{f} - 1$$

Solve for  $x$ .

$$14) \left[ \frac{x-4}{y+2} = 5 \right] (y+2)$$

$$x-4 = 5(y+2)$$

$$\begin{array}{r} x-4 = 5y+10 \\ \underline{+4} \quad \quad \quad \underline{+4} \end{array}$$

$$x = 5y + 14$$

Solve for  $y$  and then find the value of  $y$  given the value for  $x$ .

$$3x - 5y = 9$$

$$x = -1$$

$$3x - 5y = 9$$

$$-3x \quad -3x$$

$$\frac{-5y}{-5} = \frac{-3x + 9}{-5}$$

$$y = \frac{3}{5}x - \frac{9}{5}$$

$$y = \frac{3}{5}(-1) - \frac{9}{5}$$

$$y = \frac{-3 - 9}{5}$$

$$y = \frac{-12}{5}$$

Solve for  $a$ .

$$bd \left[ \frac{a}{b} - 8 = \frac{c}{d} \right]$$

$$\underline{ad} - 8bd = bc$$

$$+ 8bd \quad + 8bd$$

$$\frac{ad}{d} = \frac{bc}{d} + \frac{8bd}{d}$$

$$a = \frac{bc}{d} + 8b$$

Solve for  $y$  and then find the value of  $y$  given the value for  $x$ .

$$5x = -4y + 4$$

$$x = 2$$

$$5x = -4y + 4$$

$$\frac{5x - 4}{-4} = \frac{-4y}{-4}$$

$$-\frac{5}{4}x + 1 = y$$

$$y = -\frac{5}{4}x + 1$$

$$y = -\frac{5}{4}(2) + 1$$

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

$$y = -\frac{5}{2} + \frac{2}{2}$$

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

Solve for  $n$ .

$$-5 \left[ p = \left( \frac{m+n}{-5} \right) x \right]$$

$$-5p = (m+n)x$$

$$-5p = mx + \underline{nx}$$

$$\frac{-mx - 5p}{x} = \frac{nx}{x}$$

$$-m - \frac{5p}{x} = n$$

$$n = -m - \frac{5p}{x}$$

Solve for  $x$ .

$$\underset{-z}{z} - m = \underset{-z}{z} + bx$$

$$\frac{-m}{b} = \frac{bx}{b}$$

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

# Assignment:

Literal Equations

#1-14