

# Today's Plan:

**Learning Target (standard):** I will solve literal equations for a specific variable. I will use my knowledge of literal equations to put linear equations in slope-intercept form.

**Students will:** Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

**Teacher will:** Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

**Assessment:** Board work, homework check and homework assignment

**Differentiation:** Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

NAME \_\_\_\_\_

#24

## BELL RINGER



1.) Is <sup>x,y</sup>(4, 5) a solution to  $2y - 3x = -7$ ?

$$2(5) - 3(4) = -7$$

$$10 - 12 = -7$$

$$-2 \neq -7 \quad \text{NO}$$

2.) Find three different ordered pairs that are solutions of the equation  $y = 2x + 1$ .

$x = -1, 0, 1$	$y = 2(-1) + 1$	$y = 2(0) + 1$	$y = 2(1) + 1$
$(-1, -1), (0, 1), (1, 3)$	$y = -2 + 1$	$y = 1$	$y = 2 + 1$
	$y = -1$		$y = 3$

3.) Find the volume of a box that has a length of 10 inches, a width of 15 inches, and a height of 5 inches.

$$V = lwh \quad V = 10 \text{ in} \cdot 15 \text{ in} \cdot 5 \text{ in}$$

$$V = 750 \text{ in}^3$$

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  $x$ .

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

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

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

$$x = 5y + 14$$

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