

# Today's Plan:

**Learning Target (standard):** I will write the equation for a line in point-slope form, slope-intercept form and standard form. I will use the information to graph the line.

**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, and take a test on linear equations.

**Teacher will:** Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide test problems.

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

**Differentiation:** Students will work at the board, go over and correct homework at their seats, actively engage in test problems.

NAME \_\_\_\_\_

#54

## BELL RINGER

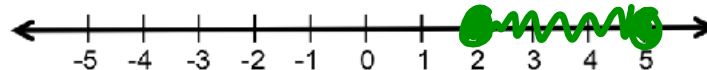


1.) Solve  $2x + 3(x - 2) = -21$ .

$$\begin{aligned} 2x + 3x - 6 &= -21 \\ 5x - 6 &= -21 \\ +6 & \quad +6 \end{aligned}$$

$$\begin{aligned} 5x &= -15 \\ \frac{5x}{5} &= \frac{-15}{5} \\ x &= -3 \end{aligned}$$

2.) Graph  $2 \leq x \leq 5$ .



3.) Find the area of a rectangle that has a width of 8 feet and a length of 1.5 feet.

$$A = 8\text{ft} \cdot 1.5\text{ft} = 12\text{ft}^2$$

Find the equation for the line in point-slope form, slope-intercept form and standard form.

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$= \frac{3 + 5}{8 + 5}$$

$$= \frac{8}{13}$$

$$m = \frac{4}{5}$$

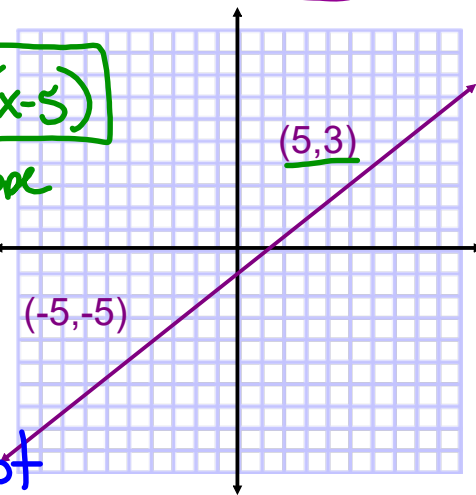
$$\textcircled{1} \boxed{y - 3 = \frac{4}{5}(x - 5)}$$
  
 point-slope

$$\textcircled{2} y - 3 = \frac{4}{5}x - 4$$
  

$$\boxed{y = \frac{4}{5}x - 1}$$
  
 slope-intercept

$$\textcircled{3} -5 \left( -\frac{4}{5}x + y = -1 \right)$$
  

$$\boxed{4x - 5y = 5}$$
 standard



Graph using the *t*-chart method.

$$-4x + 6y = -12$$

$$+4x \qquad +4x$$

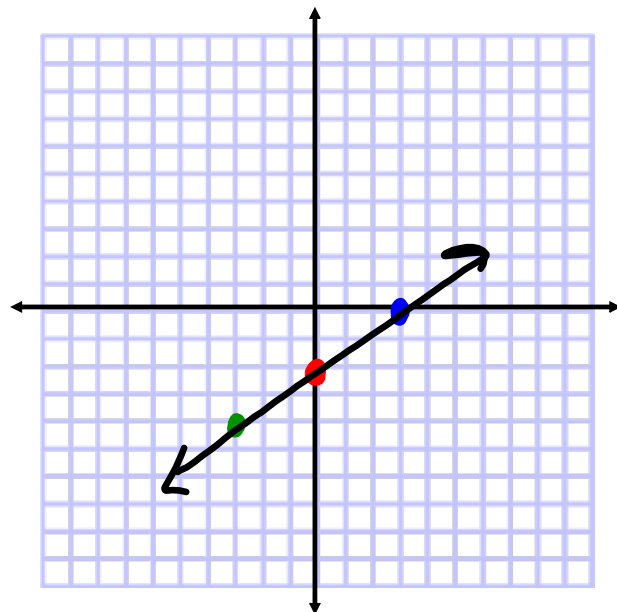
$$\frac{6y}{6} = \frac{4x}{6} - \frac{12}{6}$$

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

x	y
-3	-4
0	-2
3	0

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

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



Graph using the intercept method.

$$-3x + 6y = -18$$

$$I_x: (6, 0)$$

$$-3x = -18$$

$$I_y: (0, -3)$$

$$6y = -18$$

