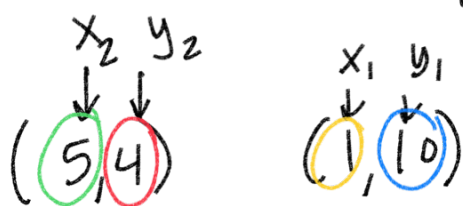


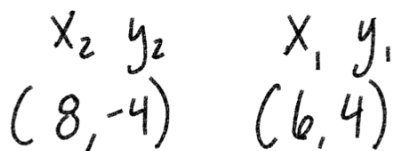
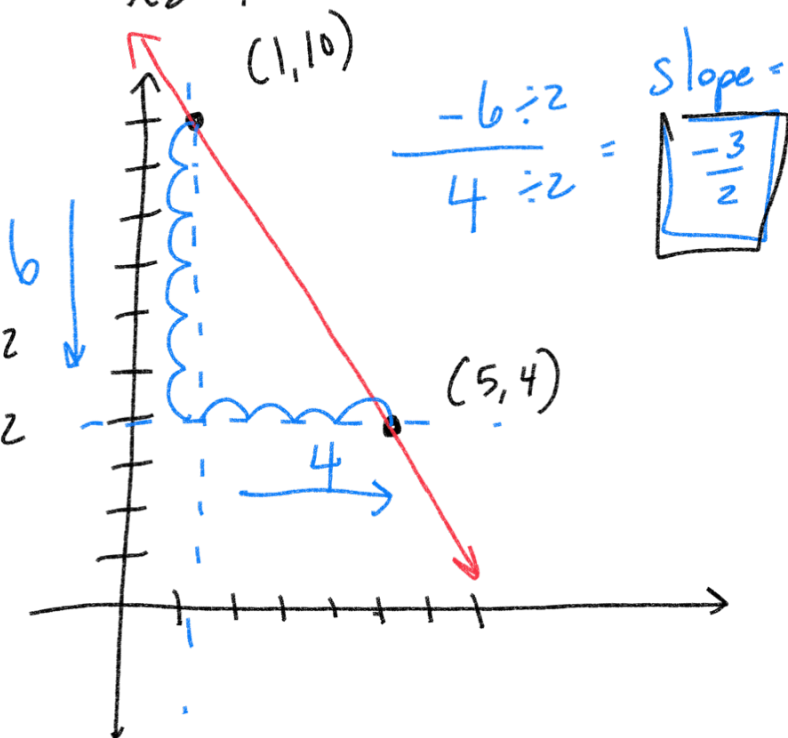
T-A1 Algebra 1 Week 30

$$\text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{\text{up/down}}{\text{over right}} = \frac{y_2 - y_1}{x_2 - x_1}$$

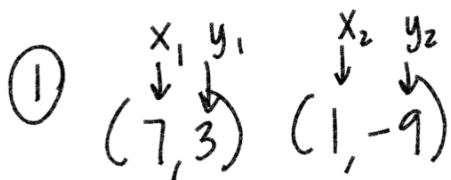


$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - 10}{5 - 1} = \frac{-6}{4} = \frac{-6 \div 2}{4 \div 2} = \frac{-3}{2}$$

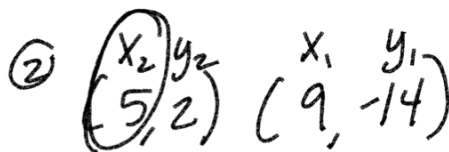
$$\boxed{\frac{-3}{2}}$$



$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-4 - 4}{8 - 6} = \frac{-8}{2} = \boxed{-4} \quad \frac{\text{down } 4}{1 \text{ right}}$$



$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{-9 - 3}{1 - 7} = \frac{-12}{-6} = \boxed{2}$$



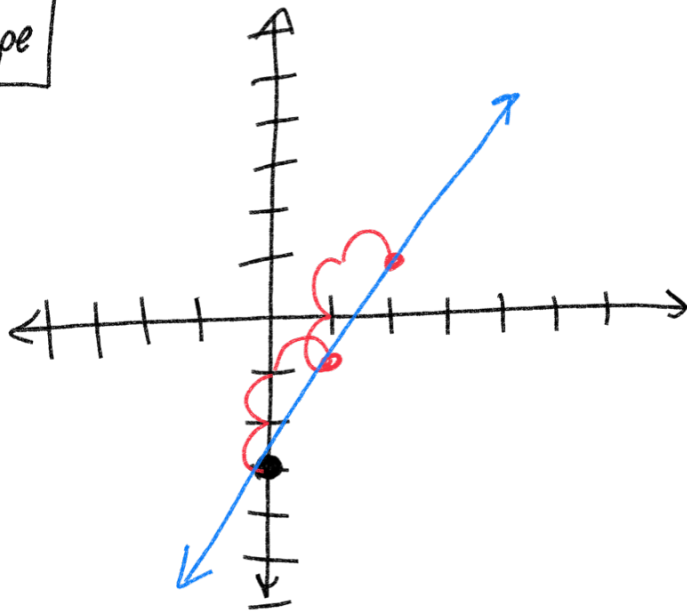
$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{2 - (-14)}{5 - 9} = \frac{2 + 14}{5 - 9} = \frac{16}{-4} = \boxed{-4}$$

Slope-Intercept Form

slope $y = m x + b$ \leftarrow y-intercept

$y = 2x - 3$

Annotations: '2' is boxed and labeled 'slope', '-3' is circled and labeled 'y-intercept'.



- 1.) Find y-int
- 2.) Use slope to find second point

slope = $\frac{2}{1}$ $\frac{\text{up } 2}{1 \text{ right}}$

Point-Slope Form

really slope equation

$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$y - y_1 = m(x - x_1)$$

$\{ (7, 3), (1, -9) \}$

$m = 2$

$$y - y_1 = m(x - x_1)$$

$$y - 3 = 2(x - 7)$$

$$y - 3 = 2x - 14$$

$+3 \qquad +3$

$$(x - x_1)(m) = \left(\frac{y - y_1}{x - x_1} \right)(x - x_1)$$

$$y - y_1 = m(x - x_1)$$

$y = 2x - 11$

$$m = \boxed{-3}$$

$$(2, 8)$$

Find the equation

$$y - y_1 = m(x - x_1)$$

$$y - 8 = -3(x - 2)$$

$$y - 8 = -3x + 6$$

$$y = -3x + 14$$

$$\text{slope} = \frac{\text{rise}}{\text{run}}$$

$$-3 = \frac{3 \text{ down}}{1 \text{ right}}$$

$$\begin{matrix} x_1 & y_1 & x_2 & y_2 \\ (2, 8) & & (-4, -10) & \end{matrix}$$

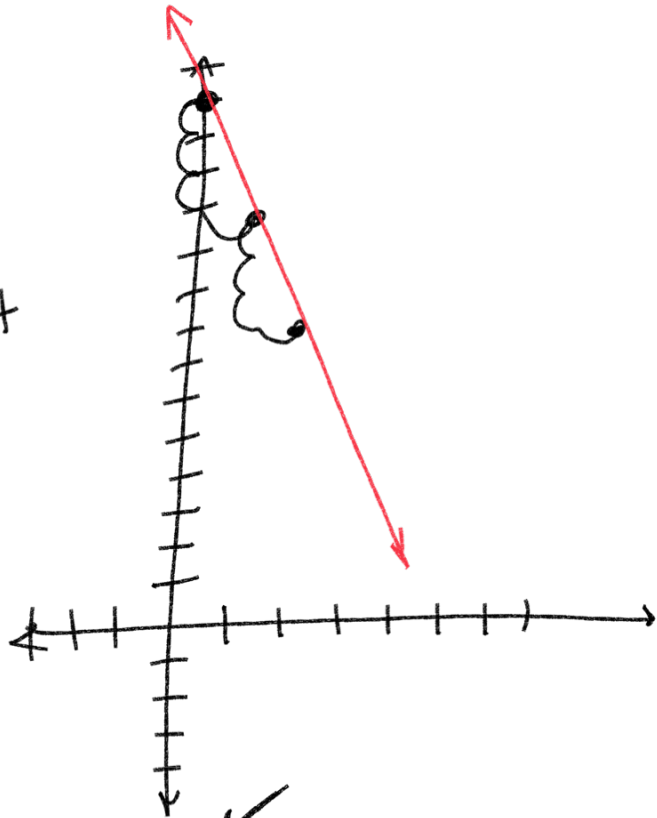
$$1.) \frac{y_2 - y_1}{x_2 - x_1} = \frac{-10 - 8}{-4 - 2} = \frac{-18}{-6} = \boxed{3}$$

1) Find slope

2) Put in Point-Slope Form

3) Convert Slope-Intercept

4) Graph



$$y - y_1 = m(x - x_1)$$

$$y - 8 = 3(x - 2)$$

$$y - 8 = 3(x - 2)$$

$$y - 8 = 3x - 6$$

$$\boxed{y = 3x + 2}$$

Slope-Intercept form

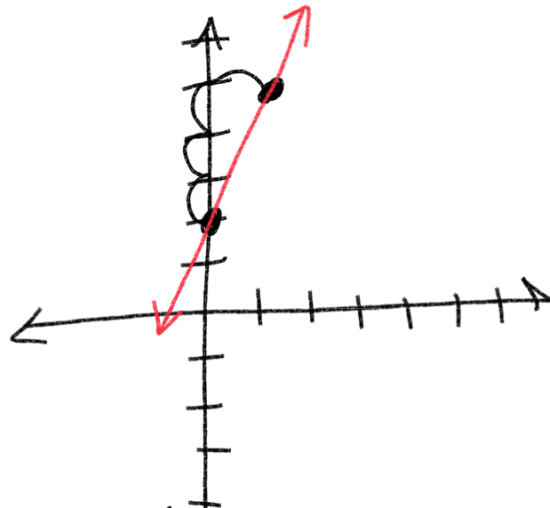
$$y - (-10) = 3(x - (-4))$$

$$y + 10 = 3(x + 4)$$

$$y + 10 = 3x + 12$$

$$\boxed{y = 3x + 2}$$

$$y = \boxed{3}x + 2$$



HW

Ch 6-1 events

6-2 events

6-4 events

Supplemental WS

Online HW 30

Quiz 30

Test 5

} May 18th

May 18th

HW/Q 29 May 7th