

2 Days

- 1-3.21-2.8
- 2-6.1-(-8.4)
- 3-0.196

5.3 Write Equations in Point-Slope Form

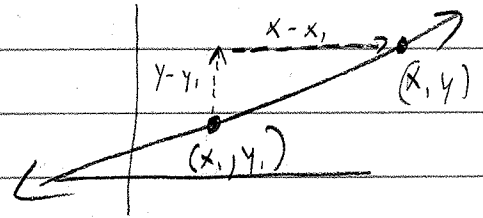
Small quiz day 2

* If have a point on line & slope of line *

For point (x_1, y_1) & slope m , Point-Slope Form is

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

\downarrow \downarrow \downarrow
 y-coord slope x-coord



Writing in P.S. Form

1) Given $P(4, -3)$ & $m = 2$

$$y - y_1 = m(x - x_1) \rightarrow \text{Just plug in } x_1, y_1 \text{ \& } m$$

$$y - -3 = 2(x - 4)$$

$$y + 3 = 2(x - 4)$$

2) Given $A(-1, 3)$ & $B(1, 1)$

Have a point (2 actually), Need to find slope!

$$m = \frac{3-1}{-1-1} = \frac{2}{-2} = -1$$

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

Use $A(-1, 3)$

Use $B(1, 1)$

$$y - 3 = -1(x - -1)$$

$$y - 1 = -1(x - 1)$$

$$y - 3 = -1(x + 1)$$

Are they same?

Write in slope-Int Form to check!

(Solve for y)

$$y - 3 = -1x - 1$$

+3 +3

$$y - 1 = -1x + 1$$

+1 +1

$$y = -1x + 2$$

Are the

SAME!

$$y = -1x + 2$$

Day 1

PSOS!
3-5, 9-13,
23

Day 2

15, 20-22, 29
32, 37, 39