HAT

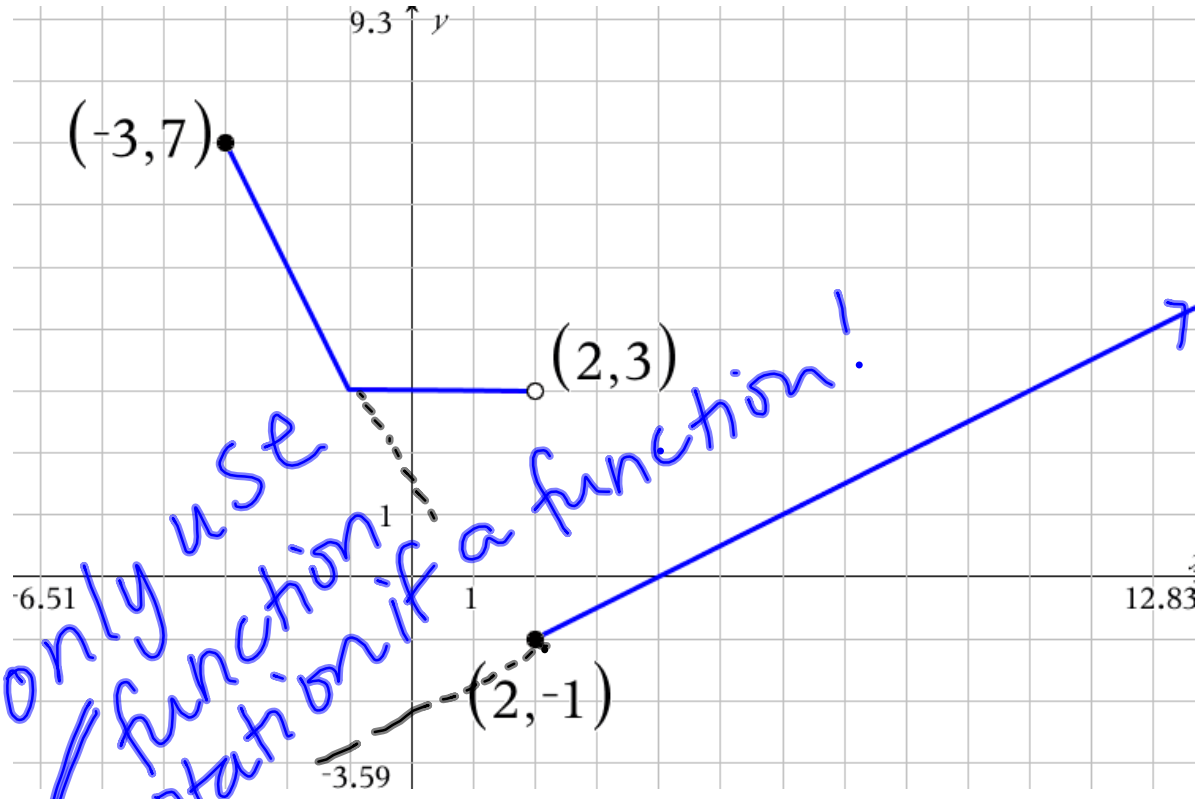
8/21/17

HAPPY ECLIPSE DAY!

Intro to Piecewise Functions

10-second Walking Instructions:

1. Stand 1.5m from the sensor.
2. When you hear the sensor start to click, stand still for 4 seconds.
3. Walk quickly away from the sensor at a uniform speed for 3 seconds.
4. Stop and walk back towards the sensor slowly at a uniform speed until the clicking stops.



only use function notation if a function!

$$f(x) = \begin{cases} -2(x+3)+7 & \text{for } -3 \le x \le -1 \\ 3 & \text{for } -1 < x < 2 \\ \frac{1}{2}(x-2)-1 & \text{for } x \ge 2 \end{cases}$$

$$f(x) = \begin{cases} -2x+1 & \text{for } -3 \le x \le -1 \\ 3 & \text{for } -1 < x < 2 \\ -\frac{1}{2}x-2 & \text{for } x \ge 2 \end{cases}$$

Jeff created a distance versus time graph by starting at the 2-meter mark on the floor. He walked towards the detector at 0.25 m/s for 4 seconds, stood still for 2 seconds, walked away from the detector at 0.4 m/s for 2 seconds, and then stopped for 2 seconds. Sketch a plot of Jeff's distance versus time graph, and write the piecewise equation. What was Jeff's ending position?

Assignment:

Read pg 101-102

pg. 105 #12-19