

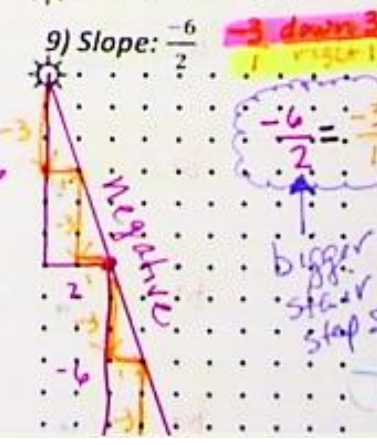
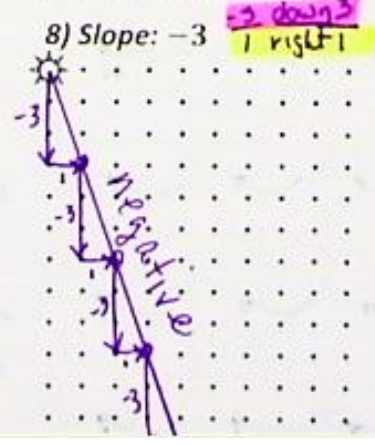
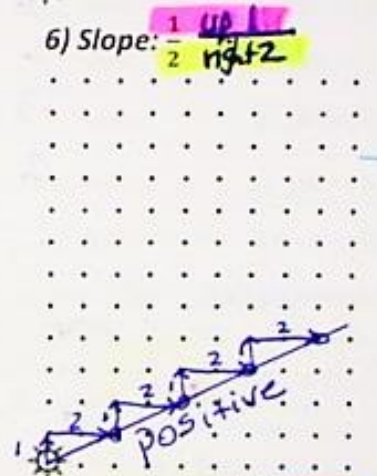
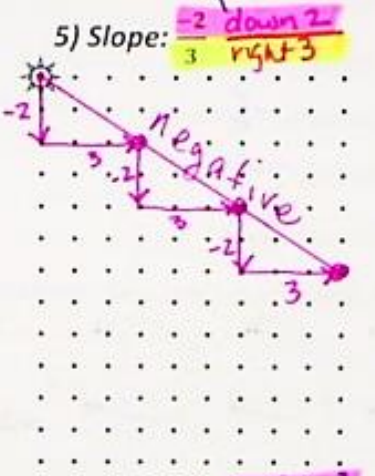
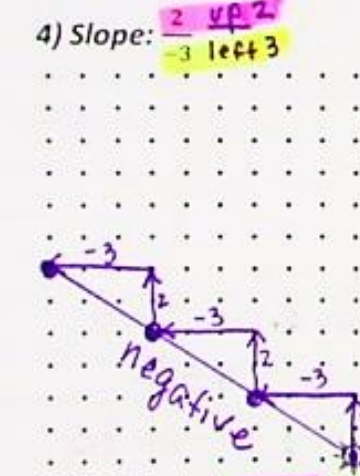
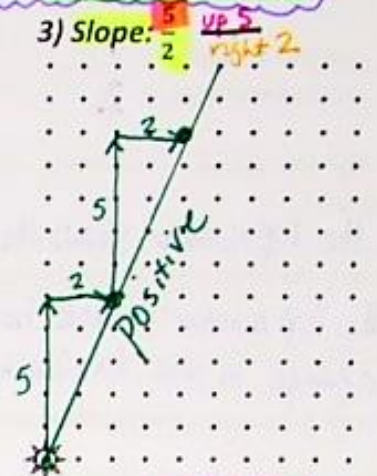
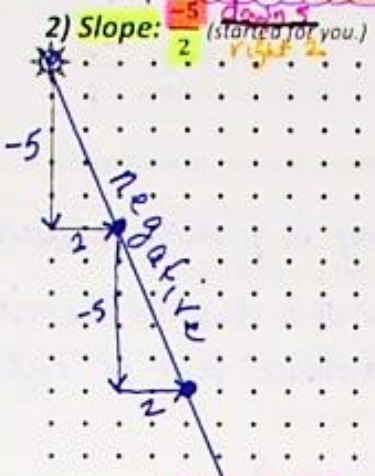
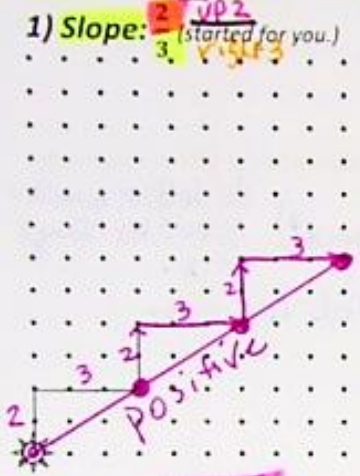
# Unit 3 Notes: "Practice with Stair-Steps and Slope"

(SLOPE)



## Practice Making Stair Steps

Make a sketch of stair steps with the given steepness. The steepness ratio is **vertical measure** compared to **horizontal measure**. (rise over run) Start your stair steps at the (Positive is up or right while negative is down or left.)





### Practice with Slope & y-intercept

For each equation, complete each table, graph, and identify the slope and y-intercept.

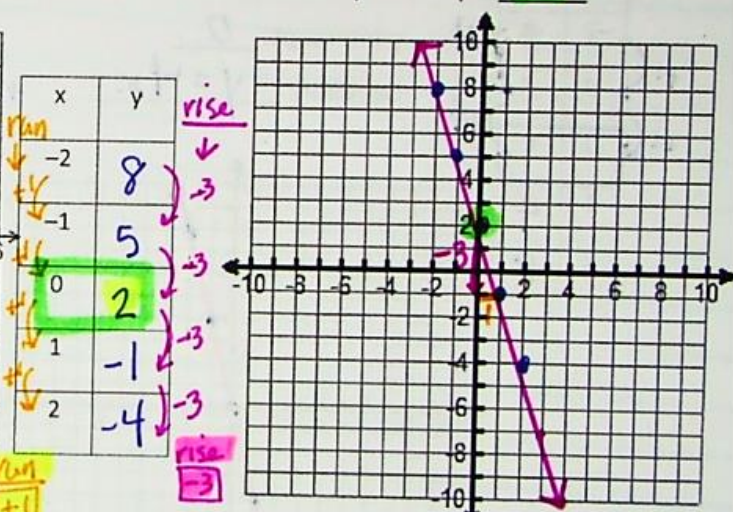
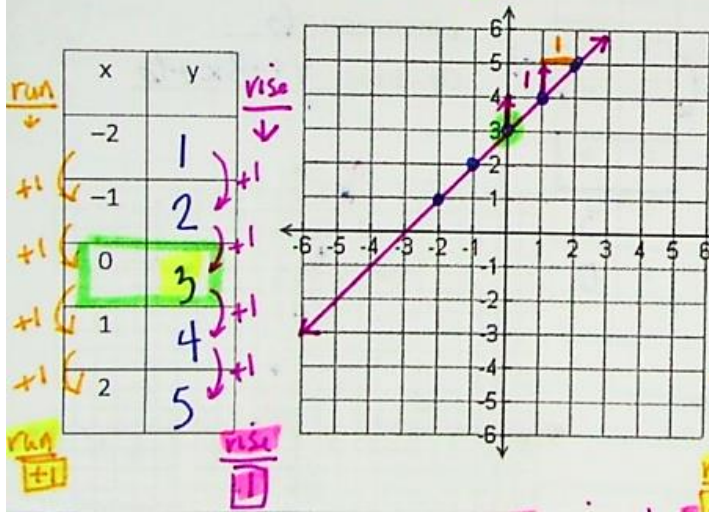
1)  $y = x + 3$  Slope: 1  $\frac{\text{rise}}{\text{run}} = \frac{1}{1} = 1$

2)  $y = -3x + 2$

Slope: -3  $\frac{\text{rise}}{\text{run}} = \frac{-3}{1} = -3$

y-intercept: 3

y-intercept: 2



3)  $y = -x - 4$

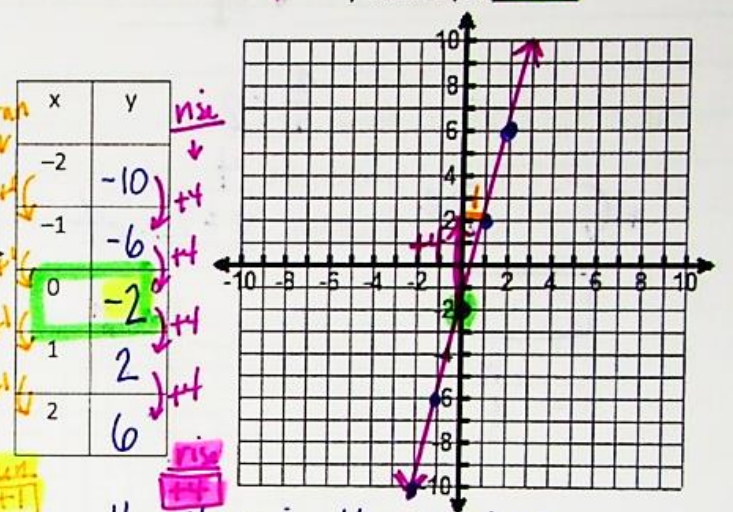
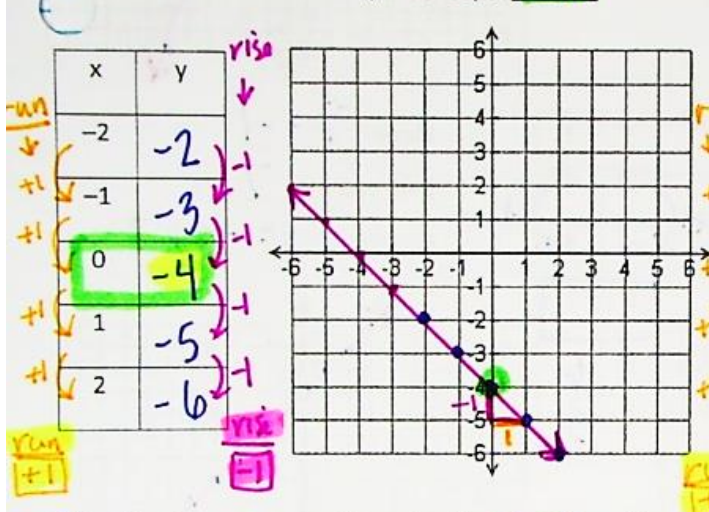
Slope: -1  $\frac{\text{rise}}{\text{run}} = \frac{-1}{1} = -1$

4)  $y = 4x - 2$

Slope: 4  $\frac{\text{rise}}{\text{run}} = \frac{4}{1} = 4$

y-intercept: -4

y-intercept: -2



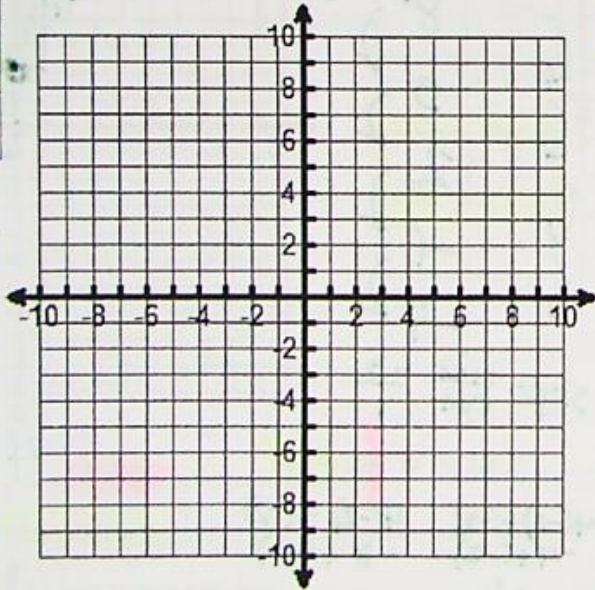
5) Explain how you can determine the **slope** from the equation the slope is the number multiplied with x (coefficient of x), from the table the difference between a pair of consecutive y values: d. of x's, from the graph the vertical change compared to the horizontal change from one point to the next.

Explain how you can determine the **y-intercept** from the equation the y intercept is the number added to the x-term., from the table the y-value paired with x when it is zero, from the graph the y-value of the point where the line crosses the y-axis.



e, determine the pattern. Complete the table. Identify the slope and y-intercept. Write the graph each.

Slope: \_\_\_\_\_  
 y-intercept: \_\_\_\_\_  
 Equation: \_\_\_\_\_



8) Graph the points

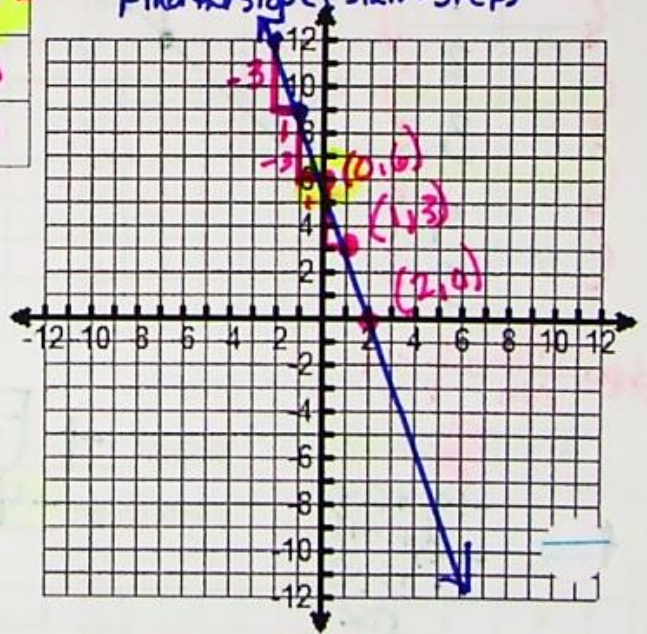
x	y
-2	12
-1	9
0	6
1	3
2	0

Slope:  $-3$   $\frac{\text{rise } -3}{\text{run } 1}$

y-intercept:  $6$

Equation:  $y = -3x + 6$

Find the slope (stair-step)



Slope: \_\_\_\_\_  
 y-intercept: \_\_\_\_\_

10)

x	y
-2	9

Slope: \_\_\_\_\_  
 y-intercept: \_\_\_\_\_