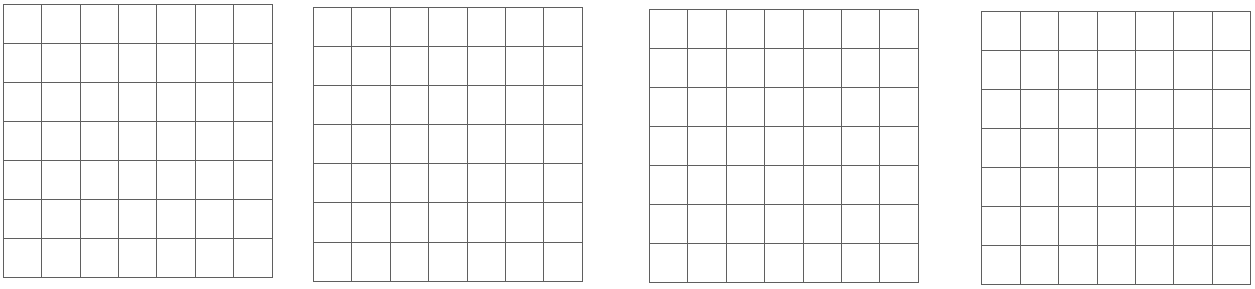
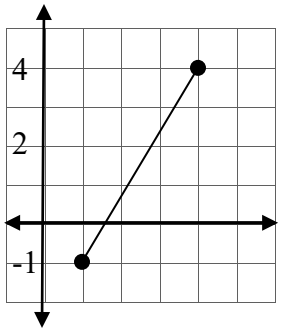
DETERMINING SLOPE USING TWO POINTS

Recall:
Draw a line that fits each description

Positive Slope Negative Slope Zero Slope Undefined Slope



Example: What is the slope of the graph shown?



Slope = _____

= _____

Calculating Slope Using Coordinates

Let the first point (,) be represented by (,)

Set the second point (,) be represented by (,)

Remember: $Slope = \frac{rise}{run} = \frac{\text{(vertical change)}}{\text{(horizontal change)}}$

Rise =

and

Run =

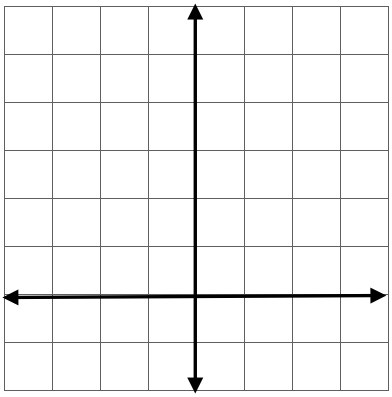
So… therefore ***Slope*** = _____

= _____

=

Example: Calculate the slope of a line that passes through the coordinates (3, 5) and (-2, 1)

Step 1: Assign (x_1, y_1) to one point and (x_2, y_2) to the other point
Step 2: Substitute values into the slope equation
Step 3: Solve



Ex: Find the slope for each line

a) A line passing through (-3,5) and (5, -2)

c) A line passing through (-10, -4) and (8, 6)

b) A line with the following table of values

x	y
1	3
2	5
3	7
4	9

d) A line with the following table of values

x	y
-2	1
-1	-4
0	-9
1	-14