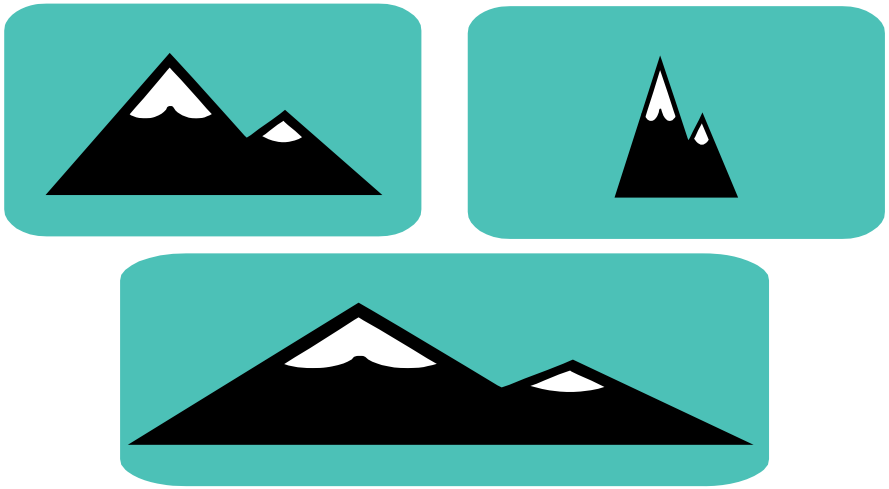
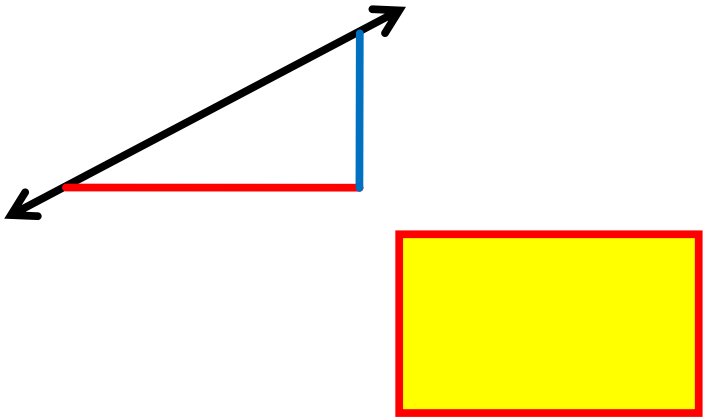
4.2
Slope of a Line

SLOPE

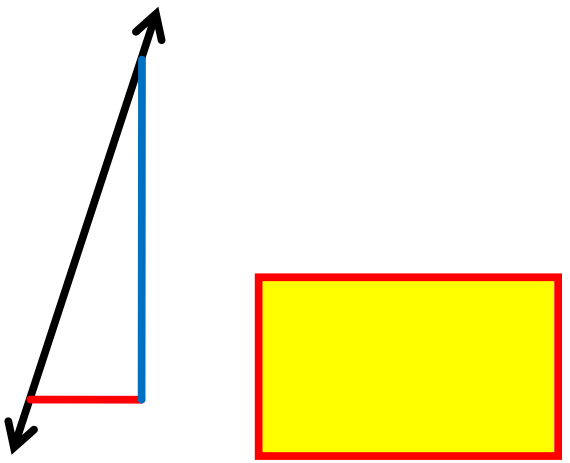
This is the measure of steepness



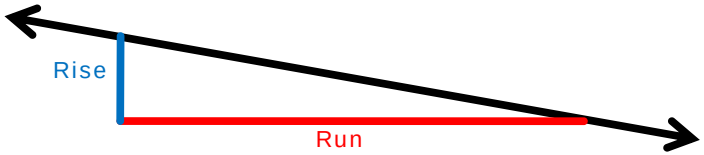
SLOPE OF A LINE



SLOPE OF A LINE

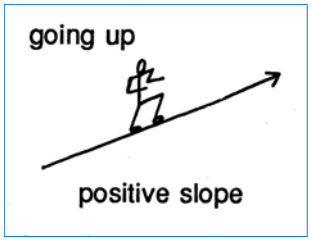


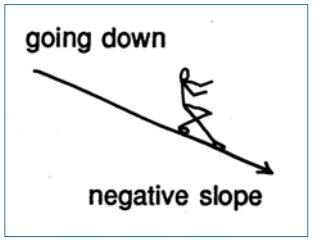
SLOPE OF A LINE

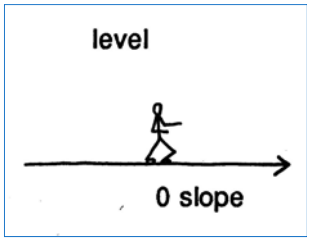


$$slope = \frac{rise}{run}$$

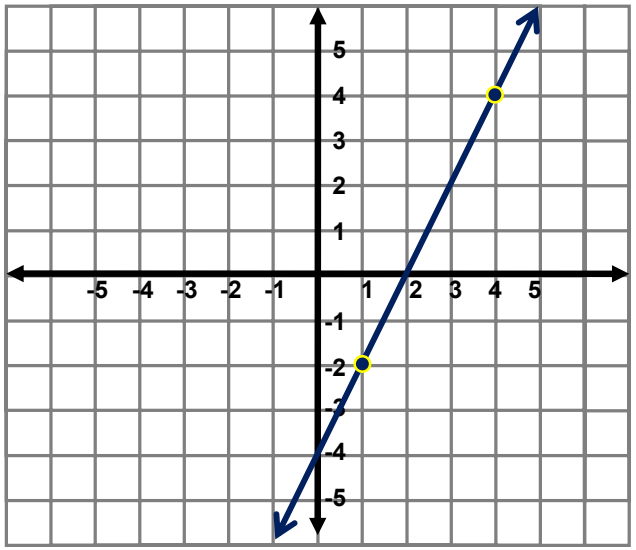
SLOPE OF A LINE





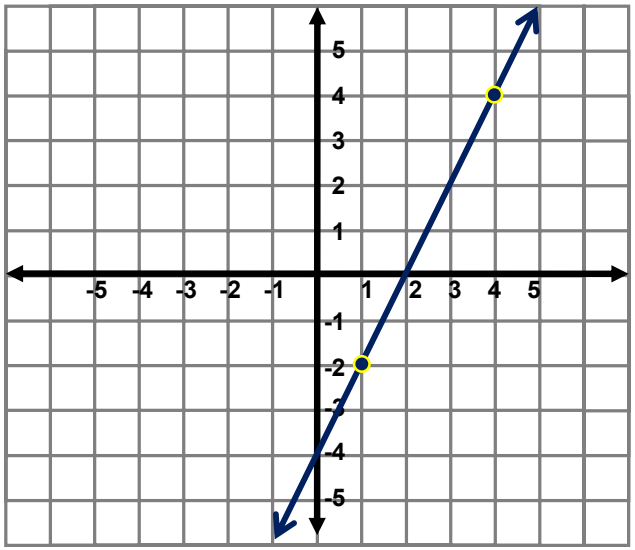


SLOPE OF A LINE



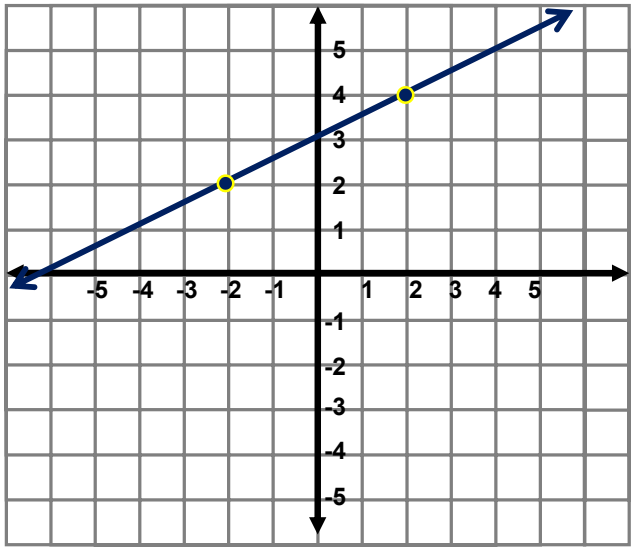
$$slope = \frac{rise}{run}$$

SLOPE OF A LINE



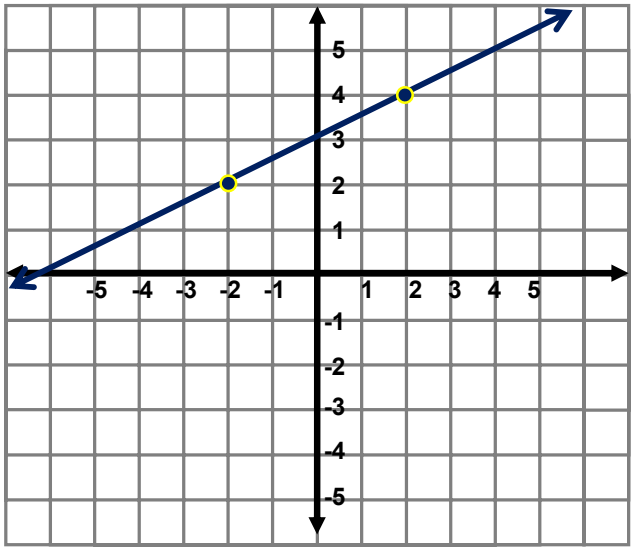
$$slope = \frac{rise}{run}$$

SLOPE OF A LINE



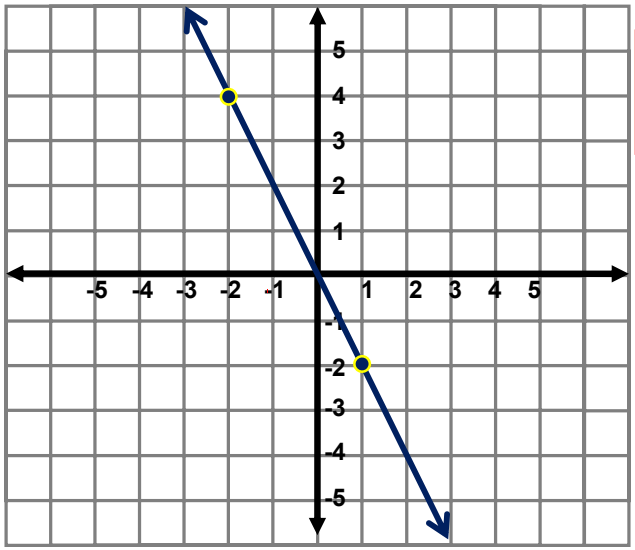
$$slope = \frac{rise}{run}$$

SLOPE OF A LINE



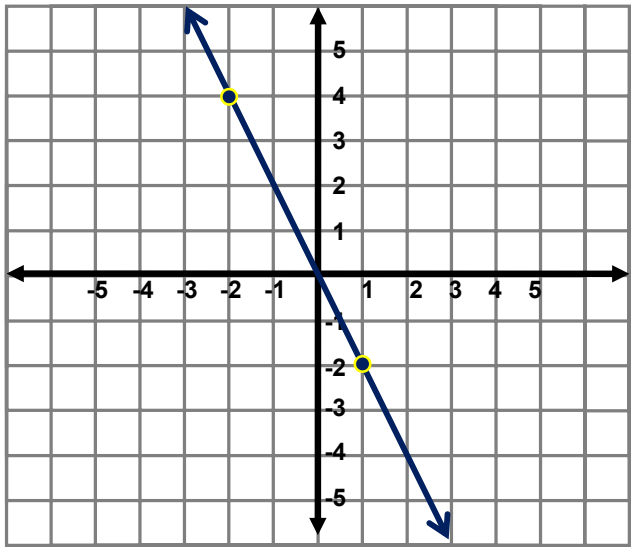
$$slope = \frac{rise}{run}$$

SLOPE OF A LINE



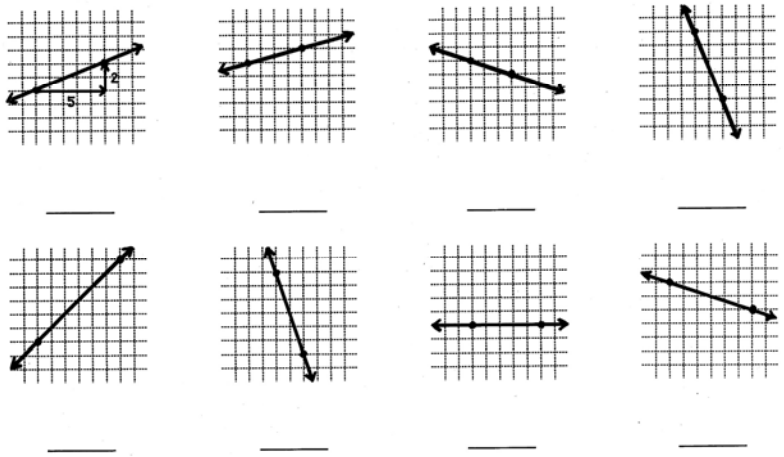
$$slope = \frac{rise}{run}$$

SLOPE OF A LINE

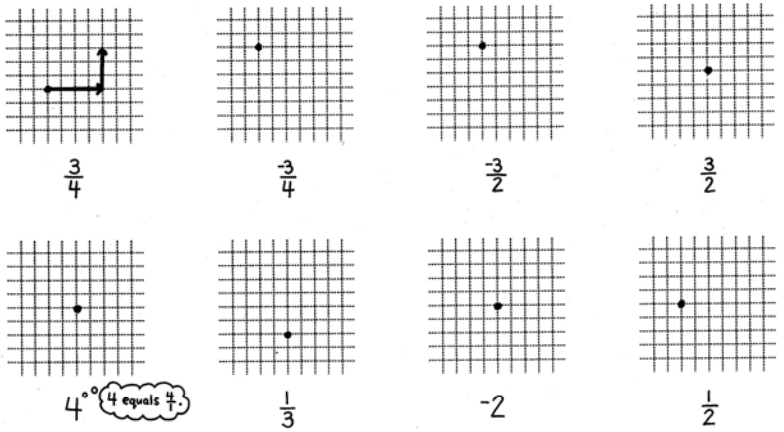


$$slope = \frac{rise}{run}$$

Find the slope of each line. Simplify the slope or write it as an integer if you can.



Through each point draw a line that has the slope shown below the grid. Use a ruler.

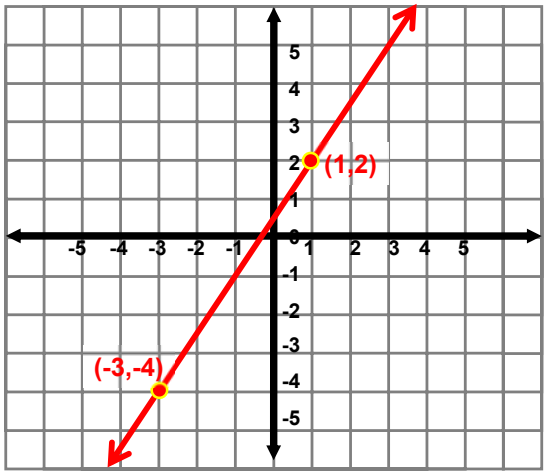


$\frac{3}{4}$ $\frac{-3}{4}$ $\frac{-3}{2}$ $\frac{3}{2}$

4 (4 equals $\frac{4}{1}$.) $\frac{1}{3}$ -2 $\frac{1}{2}$

SLOPE FORMULA

(-3, -4) and (1,2)



SLOPE FORMULA

(-3, -4) and (1,2)

If you do not have the graph of a line use…

SLOPE FORMULA

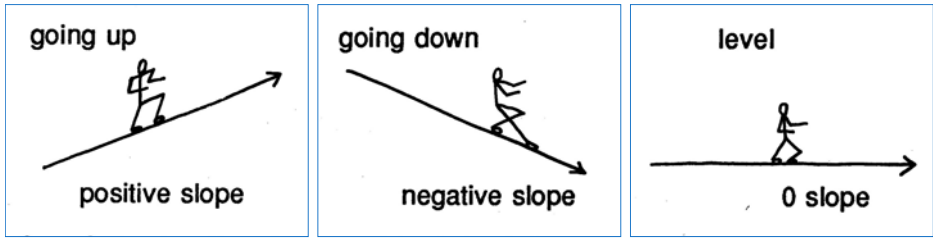
Find the slope between the two points:

1) $(7,-6)$ ***and*** $(-5,2)$

2) $(-2,3)$ ***and*** $(4,8)$

3) $(6,3)$ ***and*** $(2,0)$

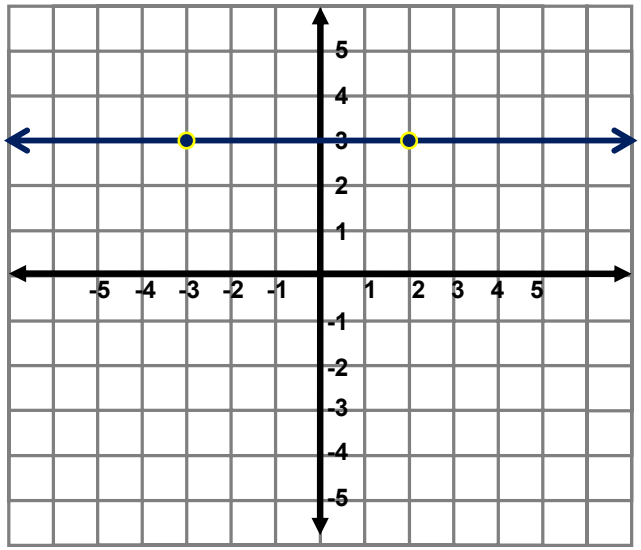
SLOPE OF A LINE



ZERO SLOPE VS UNDEFINED (NO SLOPE)

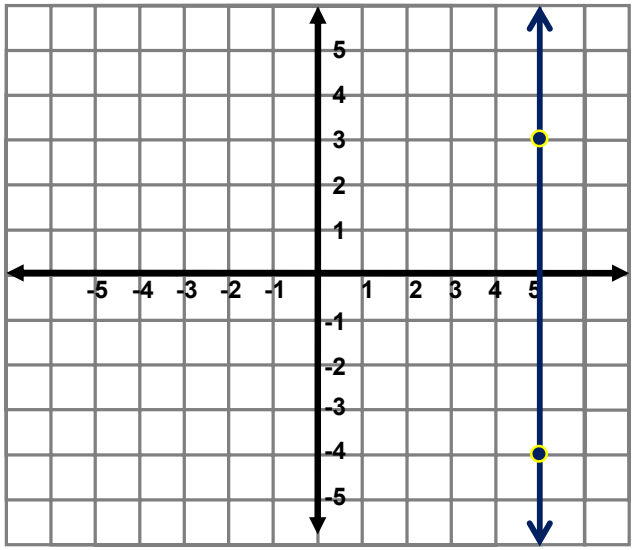
$$\frac{0}{5} \qquad \frac{5}{0}$$

SLOPE OF A LINE



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

SLOPE OF A LINE



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

SLOPE FORMULA

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Find the slope between the two points:

1) $(0,7)$ *and* $(-4,-1)$

2) $(-2,5)$ *and* $(9,5)$

SLOPE FORMULA

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Find the slope between the two points:

3) $(11,-8)$ *and* $(3,4)$

4) $(-3,9)$ *and* $(-3,5)$