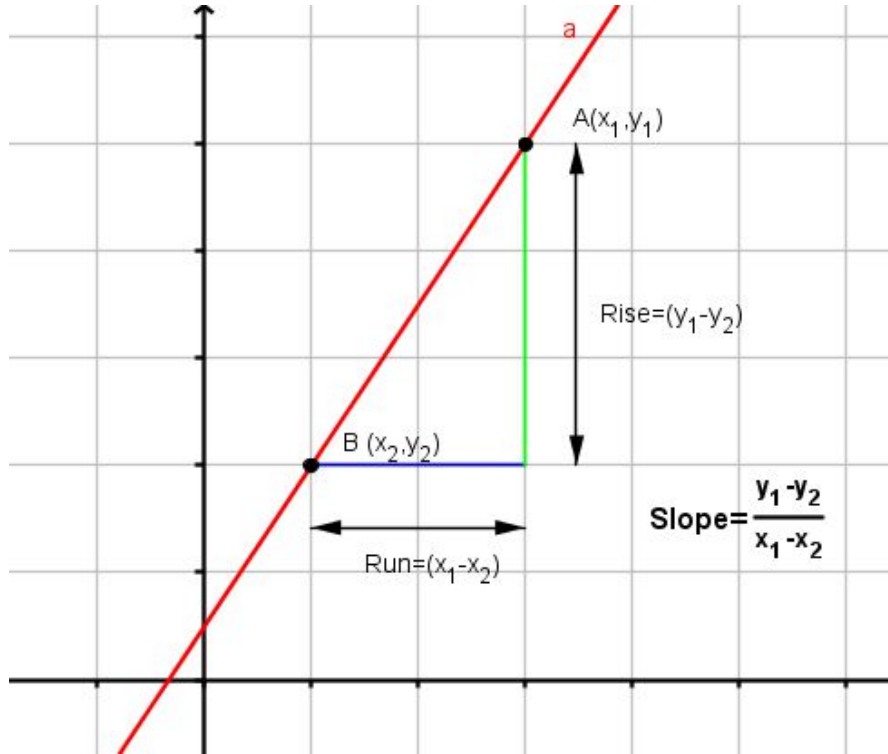


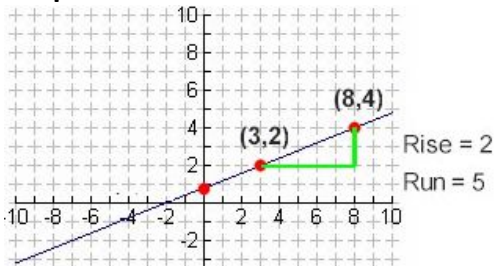
CALCULATING THE SLOPE

Given two points on a line such as $A(x_1, y_1)$ and $B(x_2, y_2)$, the slope is found by taking the difference of the y -coordinates divided by the difference of the x -coordinates.

In symbols, the definition looks like this : $\text{slope} = \frac{y_1 - y_2}{x_1 - x_2}$.



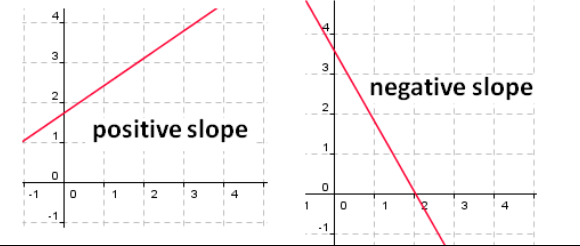
example



$$\text{slope} = \frac{4 - 2}{8 - 3}$$

$$\text{slope} = \frac{2}{5} = 0,4$$

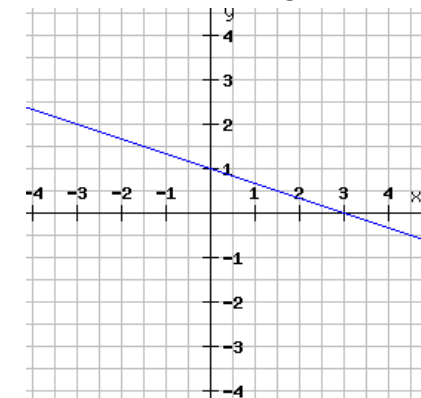
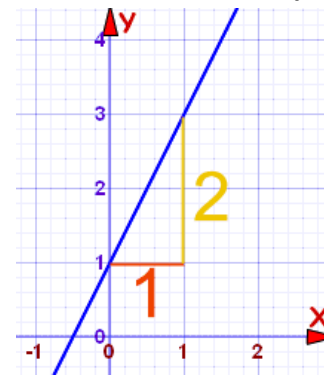
Lines that are “uphill” (from left to right) have a positive slope, and lines that are “downhill” have a negative slope.



exercise 1 In each case, use the definition to find the slope of the line connecting points A and B :

- 1) $A(0, 1)$ and $B(2, 5)$
- 2) $A(-3, 5)$ and $B(7, -2)$
- 3) $A(5, 1)$ and $B(-3, -4)$
- 4) $A(-4, 5)$ and $B(-1, 2)$

exercise 2 Find the slope of each of the lines shown in the diagrams :



Bug on a Rug

