

Slope Formula Guide

Follow the same subtraction order on top and bottom.

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

Worked Example: (1, 2) and (4, 8)

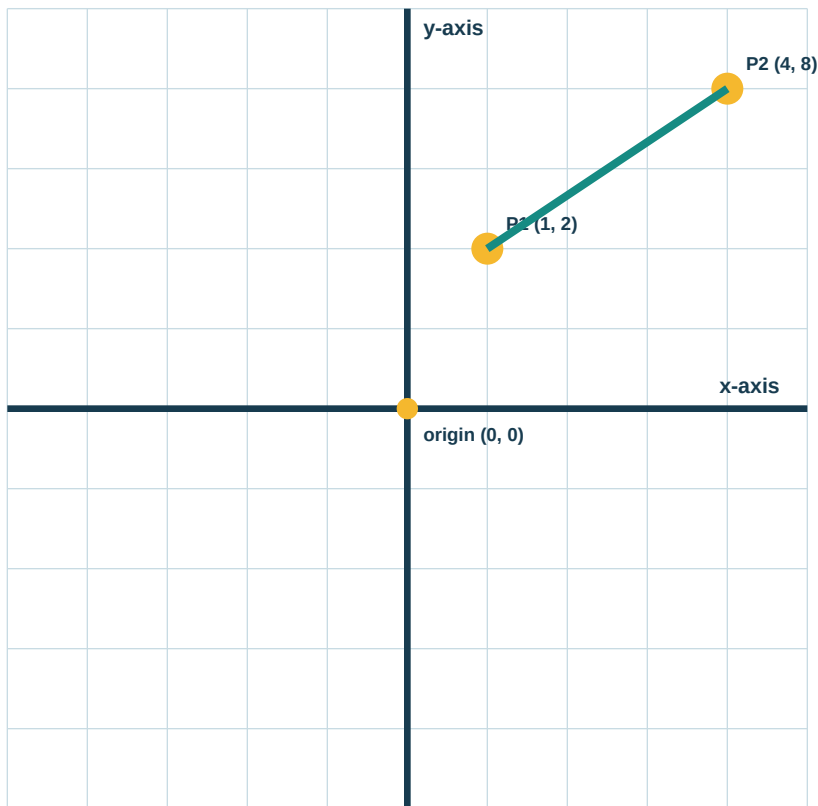
$x_1 = 1$

$x_2 = 4$

$y_1 = 2$

$y_2 = 8$

Keep each point together.



Substitute in formula order

$1. \text{ Top: } y_2 - y_1$

$8 - 2 = 6$

$2. \text{ Bottom: } x_2 - x_1$

$4 - 1 = 3$

$\text{run} = 3$

$3. \text{ Divide}$

$m = 6/3 = 2$

$\text{rise} = 6$

Visual rise and run

Remember: If you begin with $y_2 - y_1$ on top, you must use $x_2 - x_1$ on the bottom. A fraction such as $2/4$ is correct, but it simplifies to $1/2$.