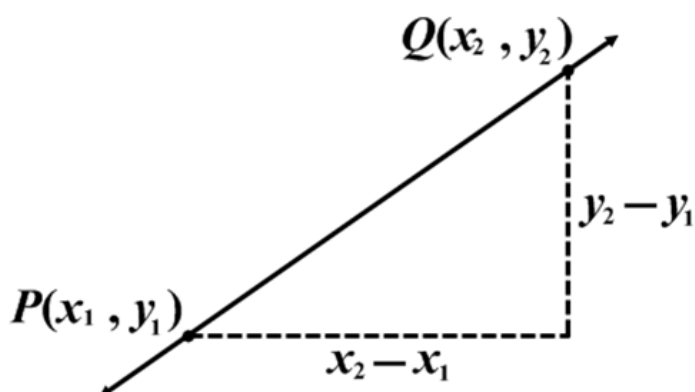


Def. Slope

How fast a line rises or falls.

Def. Slope of a line

Given the coordinates of any two points that determine a nonvertical line, the slope, m , of a line is the ratio of the change in y to the the change in x



$$\text{Slope of } \overrightarrow{PQ} = m = \frac{y_2 - y_1}{x_2 - x_1}$$

Slope Formula

The formula to find the slope of line on the coordinate plane with coordinates (x_1, y_1) and (x_2, y_2) is as follows:

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

Post. 3.2

On the coordinate plane, 2 lines are **parallel if their slopes are exactly the same.**

Post. 3.3

On the coordinate plane, 2 lines are **perpendicular if their slopes are opposite reciprocals.**