



Vocabulary: Slope



Vocabulary

- **Coordinates** – a set of numbers that names the location of a point.
 - In the two-dimensional coordinate plane, it takes two numbers (x , y) to specify a location.
 - The (x , y) coordinates of a point are called an *ordered pair*.
- **Rise** – the change in the y -coordinates between two points on a line.
- **Run** – the change in the x -coordinates between two points on a line.
- **Slope** – a measure of the steepness of a line.

- For two points on a line, (x_1, y_1) and (x_2, y_2) , slope is defined as:

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{\text{change in } y}{\text{change in } x} = \frac{y_2 - y_1}{x_2 - x_1}.$$

- For example, the slope of the line through the points $(2, 1)$ and $(5, 7)$ as shown to the right is:

$$\frac{7 - 1}{5 - 2} = \frac{6}{3} = 2.$$

