## Examples of finding the slope of a line

Example 1 Find the slope of the line that connects the ordered pairs $(3,5)$ and $(7,12)$
To find the slope, I use $m=\frac{y_{2}-y_{1}}{x_{2}-x_{1}}$
Subtract the y values and place that result over the difference in the x values.

$$
\frac{12-5}{7-3}=\frac{7}{4} \quad \text { The slope is } 7 / 4
$$

Example 2 Find the slope of the line that connects the ordered pairs (7, 8) and (2, 3)
Using $m=\frac{y_{2}-y_{1}}{x_{2}-x_{1}}$, we have $\frac{8-3}{7-2}=\frac{5}{5}=1$

Example 3 Find the slope of the line that connects $(2,-3)$ and $(-5,8)$

$$
\frac{8-(-3)}{-5-2}=\frac{11}{-7}
$$

