



Graphically:

Step 1: Start at the left-most point, which is point S (1, 3).

Step 2: Determine the rise (1).

Step 3: Determine the run (1).

Step 4: Using the "rise over run" definition of slope, place 1 on top of the fraction and 1 on the bottom of the fraction.

$$m = \frac{1}{1} = 1$$

Answer: $m = 1$

Algebraically:

$$\begin{array}{ccc}
 \text{(1)} & \text{(2)} & \text{(3)} \\
 m = \frac{y_2 - y_1}{x_2 - x_1} & m = \frac{3 - 4}{1 - 2} & m = \frac{-1}{-1} \\
 & & m = 1
 \end{array}$$

Step 1: Write the formula.

Step 2: ~~Substitute the given points into the formula. Let (2, 4) = (x₂, y₂) and (1, 3) = (x₁, y₁).~~

Step 3: Simplify the fraction.

Answer: $m = 1$

An activity that can reinforce the concept of slope is to have students randomly plot two points on a coordinate system and then find the slope graphically. They can check their answers by substituting the two points into the slope formula.