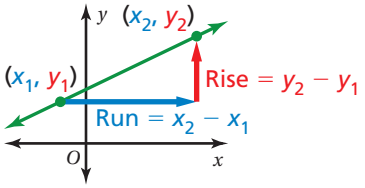
REVIEW: Slope

Name _____

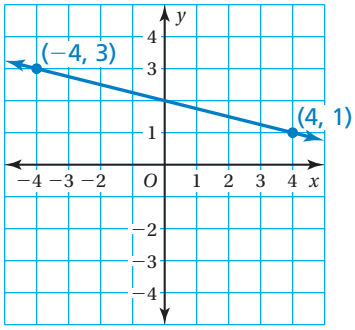
Key Concept and Vocabulary

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



Skill Examples

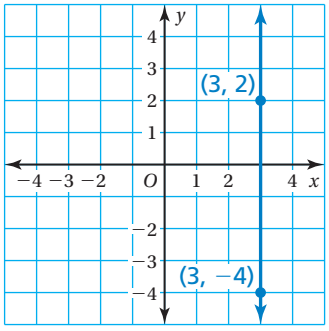
1.



$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{1 - 3}{4 - (-4)} = \frac{-2}{8} = -\frac{1}{4}$$

∴ The slope is $-\frac{1}{4}$.

2.



$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{2 - (-4)}{3 - 3} = \frac{6}{0}$$

∴ Because division by zero is undefined, the slope of the line is undefined.

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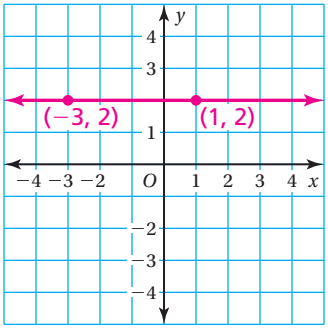
Check your answers at BigIdeasMath.com.

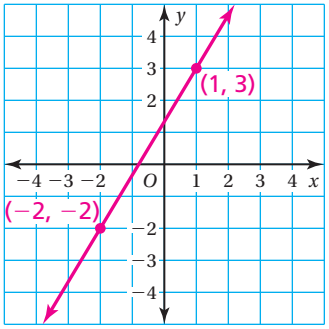
Plot the points. Then find the slope of the line through the points.

3. $(-3, 2), (1, 2)$



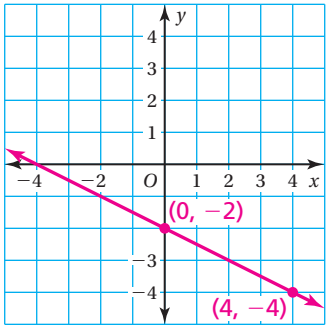
Slope = 0

4. $(-2, -2), (1, 3)$



Slope = $\frac{5}{3}$

5. $(0, -2), (4, -4)$



Slope = $-\frac{1}{2}$