Finding Slope: Ratio method

Find the slope of a line passing through (4, 6) and (7, 1).

$$\triangle y = y_2 - y_1 = 1 - 6 = \mathbf{-5}$$

$$\triangle x = x_2 - x_1 = 7 - 4 = \mathbf{3}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \frac{-5}{3} = \mathbf{-\frac{5}{3}}$$

Find the slope of a line that passes through the given two points using ratio method.

1) (5, −3) and (−1, 6)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

2) (7, 1) and (4, 8)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

3) (1, 4) and (7, −2)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

4) (−6, 4) and (2, 9)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

5) (−8, 2) and (3, 5)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

6) (−5, 3) and (1, 10)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

7) (−2, −3) and (−7, −1)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

8) (0, 1) and (4, 9)

$\triangle y$ = _____

$\triangle x$ = _____

$\text{Slope} = \frac{\triangle y}{\triangle x} =$ _____

Answer key

Finding Slope: Ratio method

Find the slope of a line passing through (4, 6) and (7, 1).

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Find the slope of a line that passes through the given two points using ratio method.

1) (5, −3) and (−1, 6)

$$\triangle y = \underline{\quad \textbf{9} \quad}$$

$$\triangle x = \underline{\quad \textbf{−6} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \mathbf{-\frac{3}{2}} \quad}$$

2) (7, 1) and (4, 8)

$$\triangle y = \underline{\quad \textbf{7} \quad}$$

$$\triangle x = \underline{\quad \textbf{−3} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \mathbf{-\frac{7}{3}} \quad}$$

3) (1, 4) and (7, −2)

$$\triangle y = \underline{\quad \textbf{−6} \quad}$$

$$\triangle x = \underline{\quad \textbf{6} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \textbf{−1} \quad}$$

4) (−6, 4) and (2, 9)

$$\triangle y = \underline{\quad \textbf{5} \quad}$$

$$\triangle x = \underline{\quad \textbf{8} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \mathbf{\frac{5}{8}} \quad}$$

5) (−8, 2) and (3, 5)

$$\triangle y = \underline{\quad \textbf{3} \quad}$$

$$\triangle x = \underline{\quad \textbf{11} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \mathbf{\frac{3}{11}} \quad}$$

6) (−5, 3) and (1, 10)

$$\triangle y = \underline{\quad \textbf{7} \quad}$$

$$\triangle x = \underline{\quad \textbf{6} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \mathbf{\frac{7}{6}} \quad}$$

7) (−2, −3) and (−7, −1)

$$\triangle y = \underline{\quad \textbf{2} \quad}$$

$$\triangle x = \underline{\quad \textbf{−5} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \mathbf{-\frac{2}{5}} \quad}$$

8) (0, 1) and (4, 9)

$$\triangle y = \underline{\quad \textbf{8} \quad}$$

$$\triangle x = \underline{\quad \textbf{4} \quad}$$

$$\text{Slope} = \frac{\triangle y}{\triangle x} = \underline{\quad \textbf{2} \quad}$$