Find the Slopes

Name _____

Score _____

SL:10

Example : Find the slope of a line passing through points (2, 3) and (–1, –4).

$$\text{rise} = \triangle y = y_2 - y_1 = -4 - 3 = -7$$

$$\text{run} = \triangle x = x_2 - x_1 = -1 - 2 = -3$$

$$\text{Slope} = m = \frac{\text{rise}}{\text{run}} = \frac{\triangle y}{\triangle x} = \frac{-7}{-3} = \mathbf{\frac{7}{3}}$$

Find the slope of each line that passes through the given two points by calculating rise and run. Complete the table.

Q.No	Points	Rise ($\triangle y$)	Run ($\triangle x$)	Slope(m)
1)	(–5, 3) and (7, –10)			
2)	(0, 2) and (8, 6)			
3)	(4, –7) and (–1, –4)			
4)	(–5, 9) and (3, 9)			
5)	(–3, –2) and (7, –8)			
6)	(–1, 0) and (–5, –5)			

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Answer key

SL:10

Example : Find the slope of a line passing through points (2, 3) and (–1, –4).

$$\text{rise} = \triangle y = y_2 - y_1 = -4 - 3 = -7$$

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Find the slope of each line that passes through the given two points by calculating rise and run. Complete the table.

Q.No	Points	Rise ($\triangle y$)	Run ($\triangle x$)	Slope(m)
1)	(–5, 3) and (7, –10)	**–13**	**12**	$\mathbf{-\frac{13}{12}}$
2)	(0, 2) and (8, 6)	**4**	**8**	$\mathbf{\frac{4}{8}}$ **or** $\mathbf{\frac{1}{2}}$
3)	(4, –7) and (–1, –4)	**3**	**–5**	$\mathbf{-\frac{3}{5}}$
4)	(–5, 9) and (3, 9)	**0**	**8**	**0**
5)	(–3, –2) and (7, –8)	**–6**	**10**	$\mathbf{-\frac{6}{10}}$ **or** $\mathbf{-\frac{3}{5}}$
6)	(–1, 0) and (–5, –5)	**–5**	**–4**	$\mathbf{\frac{5}{4}}$