

Find the Slopes

Name			
Score			

SL:12

Example: Find the slope of a line passing through points (-4, 8) and (3, -1).

rise =
$$\triangle y = y_2 - y_1 = -1 - 8 = -9$$

run =
$$\triangle X = x_2 - x_1 = 3 + 4 = 7$$

Slope = m =
$$\frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{-9}{7}$$

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 (△y)	Run(△x)	Slope(m)
1)	(1, 8) and (7, –4)			
2)	(–2, –3) and (–9, –3)			
3)	(0, –6) and (–5, 10)			
4)	(2, 3) and (8, –1)			
5)	(-7, -7) and (-3, -3)			
6)	(6, 9) and (0, 0)			



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Answer key

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Q.No	Points	Rise (△y)	Run(△x)	Slope(m)
1)	(1, 8) and (7, –4)	-12	6	-2
2)	(-2, -3) and (-9, -3)	0	-7	0
3)	(0, −6) and (−5, 10)	16	-5	- <u>16</u> 5
4)	(2, 3) and (8, –1)	-4	6	$-\frac{4}{6}$ or $-\frac{2}{3}$
5)	(-7, -7) and (-3, -3)	4	4	1
6)	(6, 9) and (0, 0)	-9	-6	$\frac{-9}{-6}$ or $\frac{3}{2}$