Examples

$\frac{\Delta y}{\Delta x} = \frac{\text{Rise}}{\text{Run}} = \frac{y_2 - y_1}{x_2 - x_1}$

Find the slope between the following points

1. (-2, 3) and (1, 5)

$\frac{\Delta y}{\Delta x} = \frac{2}{3}$

$\frac{y_2 - y_1}{x_2 - x_1} = \frac{5 - 3}{1 - -2} = \frac{2}{3}$

2. (-5, 4) and (4, -7)

$\frac{\Delta y}{\Delta x} = \frac{-11}{9}$

$\frac{y_2 - y_1}{x_2 - x_1} = \frac{-7 - 4}{4 - -5} = \frac{-11}{9}$

$\frac{4 - -7}{-5 - 4} = \frac{11}{-9}$

3. (0, -9) and (10, -5)

$\frac{\Delta y}{\Delta x} = \frac{4}{10} = \frac{2}{5}$

$\frac{y - y}{x - x} = \frac{-5 - -9}{10 - 0} = \frac{4}{10} = \frac{2}{5}$

4. (2, 5) and (-6, 5)

$\frac{\Delta y}{\Delta x} = \frac{5 - 5}{-6 - 2} = \frac{0}{-8} = 0$

5. (-4, 9) and (-4, -3)

$\frac{\Delta y}{\Delta x} = \frac{9 - -3}{-4 - -4} = \frac{12}{0} =$ Undefined