

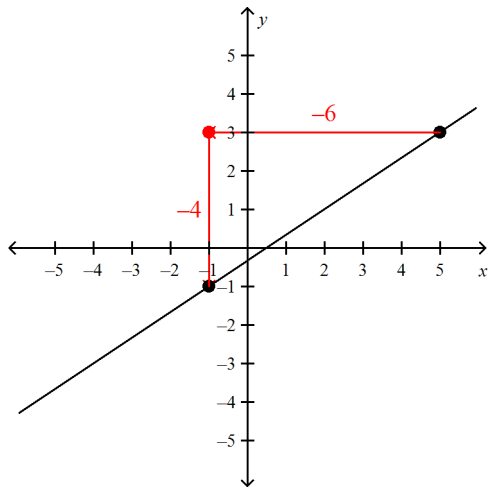
4. Find the slope of the line containing the two points: (5, 3) and (-1, -1).

Leave slope in fractional form.

- a. -1
b. $\frac{3}{2}$
c. $\frac{2}{3}$
d. $-\frac{1}{3}$

ANS: C

$$\text{slope} = \frac{\text{change in } y}{\text{change in } x} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{(-1) - 3}{(-1) - 5} = \frac{-4}{-6} = \frac{2}{3}$$



	Feedback
A	You calculated the run incorrectly.
B	You have "run over rise" instead of "rise over run".
C	Correct!
D	You calculated the rise incorrectly.

PTS: 1

DIF: Grade 8

REF: 1AL2.5

OBJ: Students are able to derive linear equations by using the point-slope formula.

TOP: Algebra 1

KEY: linear functions | slope | 2-point formula

MSC: Dynamic

NOT: Slope is always a fraction and not an integer: $x_2 < x_1$ | $y_2 < y_1$

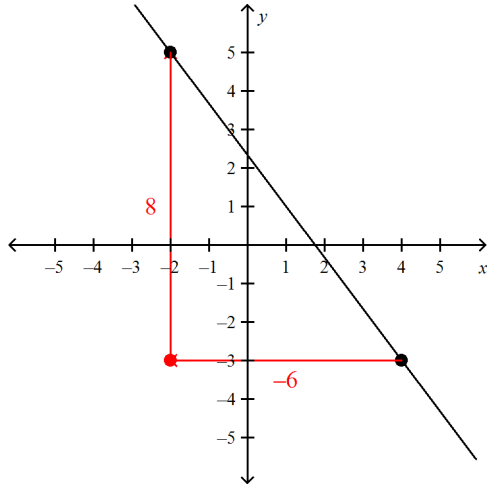
6. Find the slope of the line containing the two points: (4, -3) and (-2, 5).

Round approximate values to the nearest hundredth.

- a. -1.33
- b. 4
- c. -0.75
- d. -0.33

ANS: A

$$\text{slope} = \frac{\text{change in } y}{\text{change in } x} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{5 - (-3)}{(-2) - 4} = \frac{8}{-6} = -1.33$$



	Feedback
A	Correct!
B	You calculated the run incorrectly.
C	You have "run over rise" instead of "rise over run".
D	You calculated the rise incorrectly.

PTS: 1

DIF: Grade 8

REF: 1AL2.5

OBJ: Students are able to derive linear equations by using the point-slope formula.

TOP: Algebra1 KEY: linear functions | slope | 2-point formula

MSC: Dynamic NOT: Slope is always a decimal and not an integer: $x_2 < x_1$ | $y_2 > y_1$

