
Directions: When working each of the following questions, be sure to show all work.

- 1) Determine the constant rate of change between x and y in this table.

hint: $\frac{\text{change in } y}{\text{change in } x}$

<i>time (hours)</i>	<i>charge (\$)</i>
1	16
2	25
3	34
4	43

- a) \$8 every 2 hours
b) \$7 per hour
c) \$8 per hour
d) \$9 per hour

- 2) Find the slope of the line that passes through (10, 17) and (7, 8).

- a) $-\frac{1}{3}$
b) $\frac{1}{3}$
c) 0
d) 3

- 3) Find the slope of the line that passes through $(-12, 1)$ and $(4, 1)$.

- a) $-\frac{13}{5}$
b) $\frac{5}{13}$
c) 0
d) *undefined*

4) Find the equation for the linear function.

hint: $y = mx + b$

$m = \text{slope}$

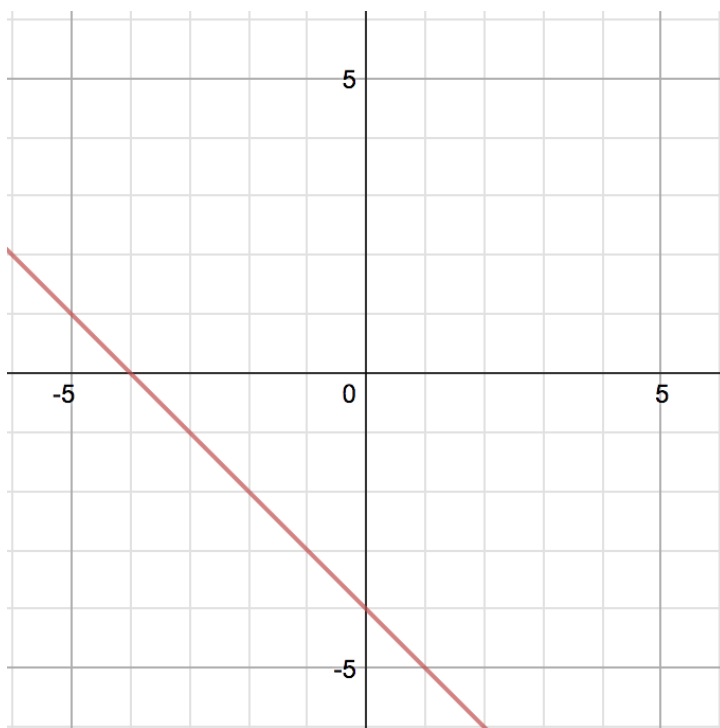
$b = y\text{-int}$

a) $y = 4x + 1$

b) $y = -x - 4$

c) $y = x - 4$

d) $y = 1x + 4$



5) Determine whether the data set shows direct variation.

hint: $y = kx$

time; min(x)	3	4	5	6
distance; mi (y)	9	12	15	18

a) no

b) no there isn't a constant of variation

c) yes; $y = 3x$

d) yes; $y = \frac{1}{3}x$