

| Name | Score: |
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Course 3: Gauge Ch3d

Proportional Relationships and Slope

This assignment is a gauge and will not be graded

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

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

| a' | 0.6 | cun | ner | batch |
|----|-------|-----|------------|-------|
| a | , 0.0 | cup | ρc_1 | Dulli |

| # of batches(x) | 4 | 8 | 12 |
|-------------------|-----|-----|-----|
| cups of sugar (y) | 2.4 | 4.8 | 7.2 |

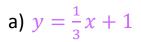
5

- b) 1 cup per batch
- c) 2.4 cups per batch
- d) 4.8 cups per batch
- 2) Find the slope of the line that passes through (2,1) and (-5,-1).
 - a) $\frac{5}{5}$
 - b) $-\frac{1}{3}$
 - c) $\frac{2}{7}$
 - d) 1
- 3) Find the slope of the line that passes through (1,4) and (-3,-1).
 - a) $-\frac{3}{4}$
 - b) $-\frac{1}{2}$
 - c) $\frac{3}{4}$
 - d) $\frac{5}{4}$

4) Find the equation for the linear function.

$$hint: y = mx + b$$

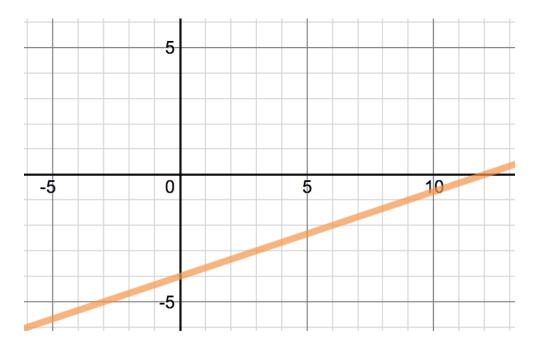
 $m = slope$
 $b = y - int$



b)
$$y = -3x - 1$$

c)
$$y = 3x - 4$$

d)
$$y = \frac{1}{3}x - 4$$



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*;
$$y = \frac{1}{3}x$$