

Name _	 Score:	_
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Course 3: Gauge Ch3c

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) 1 cup per batch

$\# of \ batches(x)$	1	2	3
cups of sugar (y)	2.35	4.70	7.05

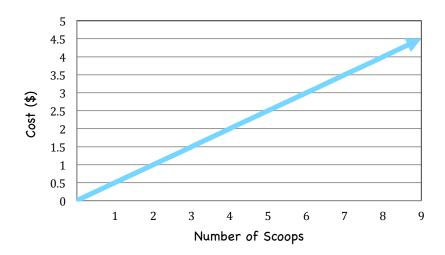
- b) 2.35 cups per batch
- c) 3.25 cups per batch
- d) 4.5 cups per batch
- 2) Find the slope of the line that passes through (4,2) and (1,3).
 - a) $\frac{5}{5}$
 - b) $-\frac{1}{3}$
 - c) $\frac{3}{5}$
 - d) 1
- 3) Find the slope of the line that passes through (-1, -2) and (3, 1).
 - a) $-\frac{3}{4}$
 - b) $-\frac{1}{2}$
 - c) $\frac{3}{4}$
 - d) $\frac{4}{3}$

4) Determine the slope (aka constant rate of change) of this line.

hint: choose two points to find slope = $\frac{rise}{run} \rightarrow \frac{change in y}{change in x} \rightarrow \frac{y_2 - y_1}{x_2 - x_1}$

# of scoops(x)	<i>cost</i> ,\$ (<i>y</i>)
x_2	y_2
x_1	y_1

- a) \$0.50 *per scoop*
- b) \$1.00 per scoop
- c) \$1.50 per scoop
- d) \$2.00 per scoop



5) Determine whether the data set shows direct variation.

hint: y = kx

time; min(x)	4	8	12	16
distance; mi (y)	12	24	36	48

- a) no
- b) no there isn't a constant of variation
- c) *yes*; y = 3x
- d) *yes*; $y = \frac{1}{3}x$