

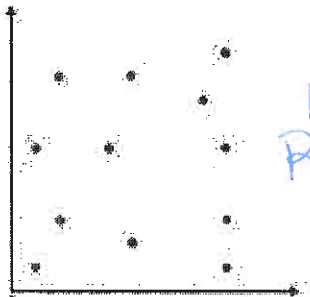
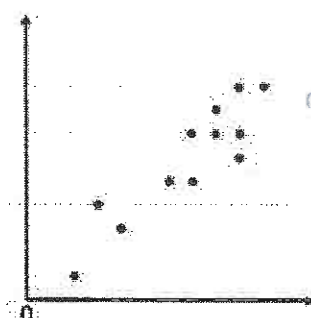
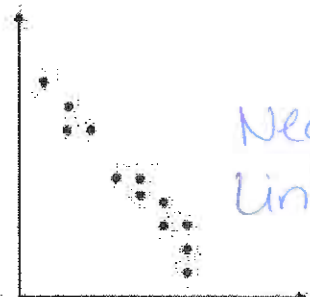
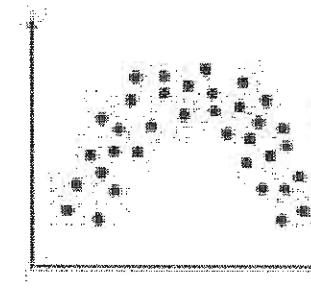
NAME: Answer Key DATE: _____ HOUR: _____

Sections 9.1 – 9.2 Review

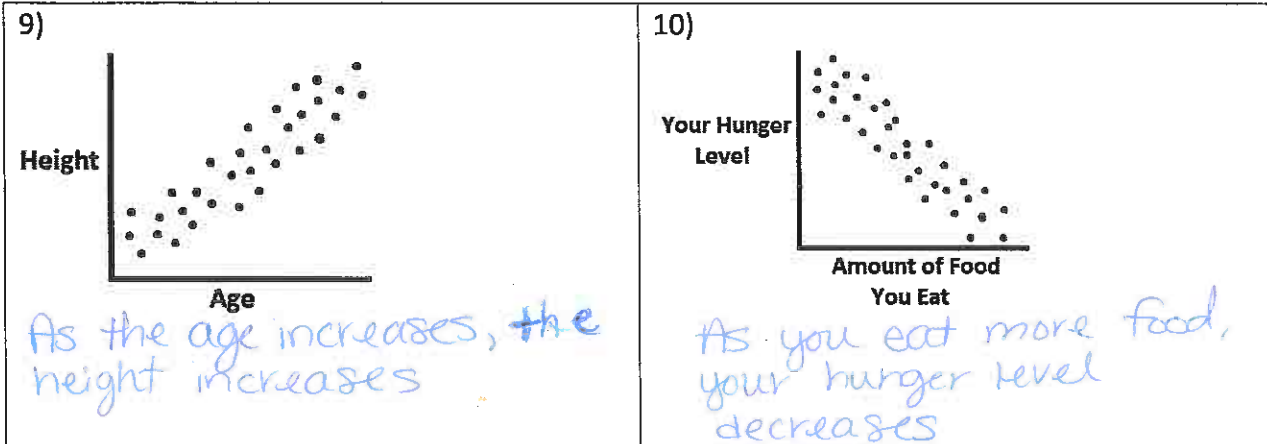
For each of the following scenarios, determine what type of relationship you would expect to see.

<p>1) The time you study for a test and the percent you earn on the test</p> <p><i>Positive Linear</i></p>	<p>2) Increasing temperatures and hot chocolate sales</p> <p><i>Negative Linear</i></p>
<p>3) the amount of hours you work and the amount of money you earn</p> <p><i>Positive linear</i></p>	<p>4) The amount of time you spend watching TV and the cost of your heating bill</p> <p><i>No Relationship</i></p>

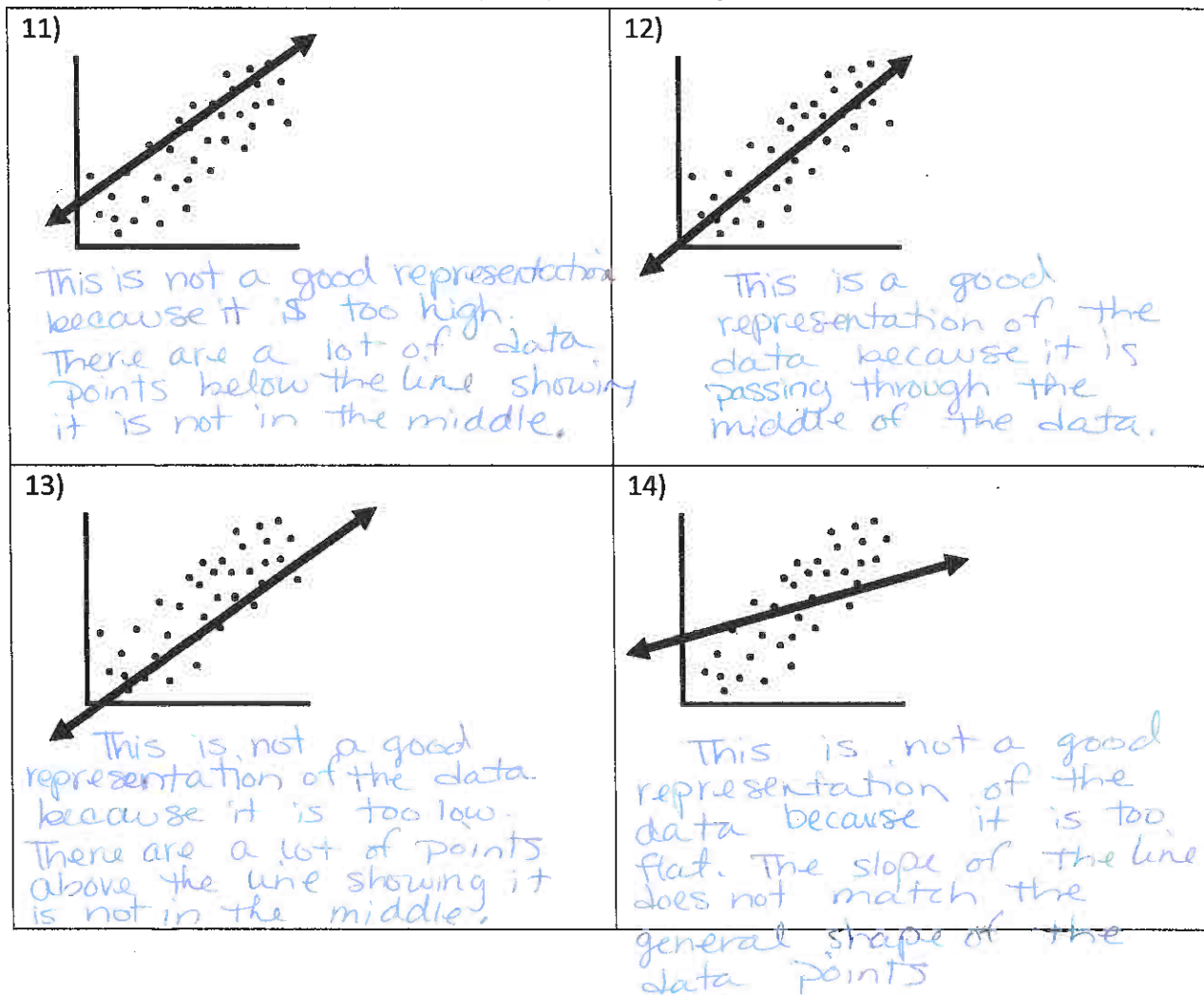
Label each of the following graphs based on the type of relationship represented.

<p>5)</p>  <p><i>No Relationship</i></p>	<p>6)</p>  <p><i>Positive Linear</i></p>
<p>7)</p>  <p><i>Negative Linear</i></p>	<p>8)</p>  <p><i>Non-Linear</i></p>

For each of the following, describe the relationship between the two quantities. (Hint: This is not labeling as positive linear/negative linear/non-linear/no relationship. Explain the relationship based off the actual quantities being compared and the change that is taking place.)

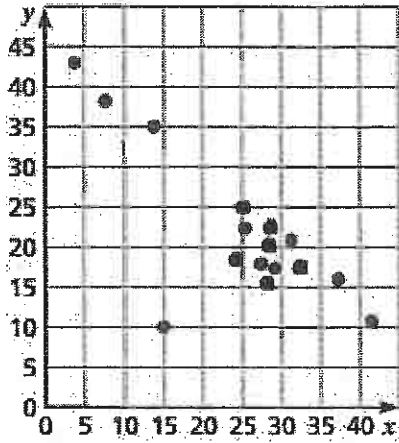


For each of the following scatter plots and line of fit drawn in, decide if the line of fit is a good representation of the data or not. Explain your reasoning.



In the following scatter plot determine if and where any outliers, gaps, and/or clusters occur.

15)



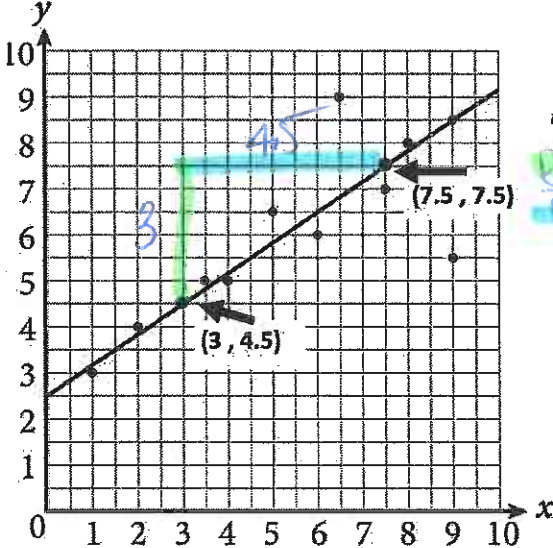
Outlier: (15, 10)

Gap: between y = 25 and y = 35

Cluster: between y = 15 and y = 25

For each of the following write the equation for the line of fit in Slope-Intercept Form.

16)

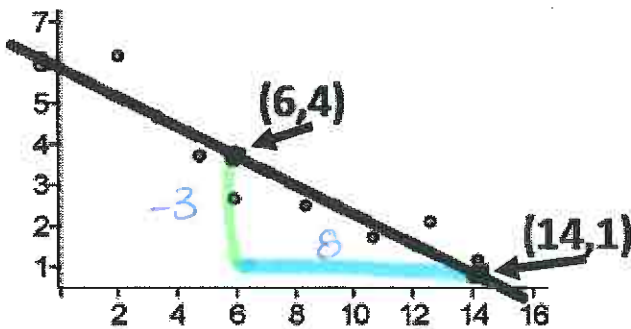


y-intercept: 2.5

$\frac{\text{rise}}{\text{run}} = \frac{3}{4.5} = 1.5 = \frac{2}{3}$
Slope: $\frac{2}{3}$ or $0.\bar{6}$

Equation: $y = \frac{2}{3}x + 2.5$
or
 $y = 0.\bar{6}x + 2.5$

17)



y-intercept: 6

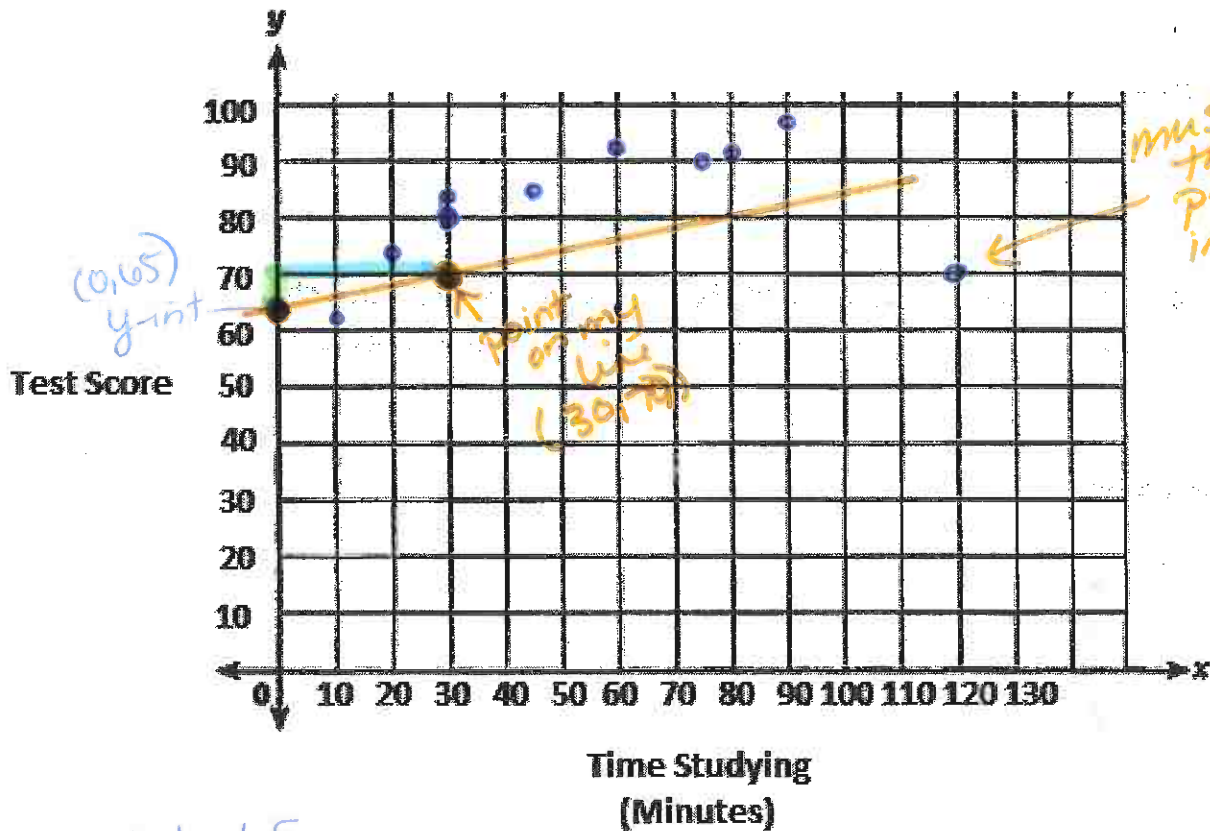
Slope: $-\frac{3}{8}$ or -0.375

Equation: $y = -\frac{3}{8}x + 6$
or
 $y = -0.375x + 6$

For the following, create a scatter plot, draw in the line of fit, and write the equation for the line of fit you drew in.

18)

Study Time (min), x	30	20	60	90	45	10	30	75	120	80
Test Score, y	80	74	92	97	85	62	83	90	70	91



$y\text{-int} = 65$
 $\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{5}{30} = \frac{1}{6}$

$$y = \frac{1}{6}x + 65$$

* Note: lines around/similar to my equation are still acceptable since it might not match exactly.