

Name:

Per:

Date:

Roster #:

## A10: C7 Reading Guide: Scatterplots, and Correlation

1. Define the following Key Vocabulary:

- scatterplot -
- association -
- direction -
- form -
- scatter -
- explanatory variable -
- response variable -
- correlation coefficient -

What menu would you use for each of the following calculator Skills?

a) r-value:

b) linear regression:

c) make a scatterplot:

3. What type of graph is used to show the relationship between two quantitative variables?
4. When describing a *scatterplot*, what four things should you always mention?
5. What is meant by an *explanatory variable*?
6. What is meant by a *response variable*?
7. What does *correlation* measure?
8. Explain the difference between *association* and *correlation*?
9. What three conditions are necessary in order to use *correlation* as a measure of *association*?
10. What does the sign of the *correlation coefficient* tell you about the association?
11. What does a *correlation* near 1 or - 1 indicate?
12. What does a *correlation* near 0 indicate?
13. Sketch an example of a scatterplot that shows two variables with a strong *association* but a weak *correlation*.
14. Is correlation *resistant* or *nonresistant* to outliers? Explain.