# Chapter 7 Review Questions

1. Match the descriptive research method to its weakness.
   1. Archival \_\_\_ construct validity
   2. Observational \_\_\_ internal validity
   3. Correlational methods in general \_\_\_ objectivity
2. Match the descriptive research method to its weakness.
   1. Archival \_\_\_ objective
   2. Lab observation \_\_\_ instrumentation bias
   3. Naturalistic observation \_\_\_ reactive
3. Match the descriptive research method to its strength.
   1. Archival \_\_\_ operational definition consistent with construct
   2. Ex post facto \_\_\_ nonreactive
   3. Tests \_\_\_ objectivity
4. Match the dot pattern to the type of correlation
   1. Dots slope up from left to right \_\_\_ negative
   2. Dots slope down from left to right \_\_\_ positive
   3. Dots seem to fit a horizontal (flat) line as they go from left to right \_\_\_ zero
5. Match the verbal description to the type of correlation
   1. Low scores on one variable are associated with low scores on

another variable \_\_\_ negative

* 1. Low scores on one variable are associated with high scores on

another variable \_\_\_ positive

* 1. Variables are not related \_\_\_ zero

1. Match the verbal description to the type of correlation
   1. High scores on one variable are associated with low scores on

another variable \_\_\_ negative

* 1. High scores on one variable are associated with high scores on

another variable \_\_\_ positive

* 1. Variables are not related \_\_\_ zero

1. The strength of a relationship between two variables is best described by the
   1. Correlation coefficient
   2. Correlation coefficient squared
   3. The coefficient of determination
   4. Both b and c
2. The strongest relationship between two variables would be indicated by a correlation of
   1. -1.00
   2. 0
   3. .5
3. A correlation of -.2 indicates that \_\_\_ of the variation in Y is explained by X.
   1. 2%
   2. 4%
   3. 20%
   4. 0%
4. Correlation is **not** the same as c\_\_\_\_\_\_\_\_\_\_\_\_ something to consider if you want internal validity.
5. True or False: The type of statistical test you use on descriptive data determines whether you can make cause-effect statements. For example, if you test whether a correlation coefficient is statistically significant, you cannot make a cause-effect statement. If, however, you use a statistical test typically used on data from experiments (like a *t* or *F* test), you can make cause-effect statements.
6. True or False: Using median splits so you can do a *t* test on correlational data is a less powerful technique that testing the significance of the correlation coefficient.

# Answers to Chapter 7 Review Questions

1. Match the descriptive research method to its weakness.
   1. Archival \_a\_\_ construct validity
   2. Observational \_c\_\_ internal validity
   3. Correlational methods in general \_b\_\_ objectivity
2. Match the descriptive research method to its weakness.
   1. Archival \_c\_\_ objective
   2. Lab observation \_a\_ instrumentation bias
   3. Naturalistic observation \_b\_\_ reactive
3. Match the descriptive research method to its strength.
   1. Archival \_c\_\_ operational definition consistent with construct
   2. Ex post facto \_\_a\_ nonreactive
   3. Tests \_b\_\_ objectivity
4. Match the dot pattern to the type of correlation
   1. Dots slope up from left to right \_b\_\_ negative
   2. Dots slope down from left to right \_\_a\_ positive
   3. Dots seem to fit a horizontal (flat) line as they go from left to right \_c\_\_ zero
5. Match the verbal description to the type of correlation
   1. Low scores on one variable are associated with low scores on

another variable \_b\_\_ negative

* 1. Low scores on one variable are associated with high scores on

another variable \_a\_\_ positive

* 1. Variables are not related \_c\_\_ zero

1. Match the verbal description to the type of correlation
   1. High scores on one variable are associated with low scores on

another variable \_a\_\_ negative

* 1. High scores on one variable are associated with high scores on

another variable \_b\_\_ positive

* 1. Variables are not related \_\_c\_ zero

1. The strength of a relationship between two variables is best described by the
   1. Correlation coefficient
   2. Correlation coefficient squared
   3. The coefficient of determination
   4. **Both b and c (the correlation coefficient squared is the coefficient of determination)**
2. The strongest relationship between two variables would be indicated by a correlation of
   1. **-1.00 (the sign of a correlation has nothing to do with the correlation’s strength)**
   2. 0
   3. .5
3. A correlation of -.2 indicates that \_\_\_ of the variation in Y is explained by X.
   1. 2%
   2. **4% (remember, squaring the correlation gives you its coefficient of determination)**
   3. 20%
   4. 0%
4. Correlation is **not** the same as **causation**, something to consider if you want internal validity.
5. True or **False**: The type of statistical test you use on descriptive data determines whether you can make cause-effect statements. For example, if you test whether a correlation coefficient is statistically significant, you cannot make a cause-effect statement. If, however, you use a statistical test typically used on data from experiments (like a *t* or *F* test), you can make cause-effect statements. **The design of the study determines whether you can make cause-effect statements. If you want to make cause-effect statements, use an experimental design.**
6. **True** or False: Using median splits so you can do a *t* test on correlational data is a less powerful technique that testing the significance of the correlation coefficient. **In the median split, you throw away detailed information about the differences between participants which then makes it harder for you to find differences between groups. For example, for everyone who scored above the median, you ignore the differences between their scores and instead treat them as if they had all gotten the same score.**