# Chapter 1: Introduction

# Practice Problem Answers

1.

a. number of cases: 253; units of analysis: young persons “hanging out” at a mall

b. number of cases: 1500; units of analysis: adult Americans

c. number of cases: 50; units of analysis: rural churches

2. (Answers will vary.)

a. theoretical definition: a feeling of assurance in oneself and one’s powers and abilities; operational definition: an ordinal variable with the attributes low, medium, and high measured with the single question “People vary when it comes to self-confidence. Some have only a little, some have a lot. Would you say you have low self-confidence, medium self-confidence, or high self-confidence?”

b. theoretical definition: ; operational definition: an ordinal variable with the attributes lower class, working class, middle class, and upper class measured with the single question “If you were asked to use one of four names for your social class, which would you say you belong in: the lower class, the working class, the middle class, or the upper class?”

3. (Answers will vary.)

a. Anthropology, Criminal Justice, Social Work, Sociology, other

b. 0%, 1%, 2%, … 98%, 99%, 100%

c. 0, 1, 2 to 3, 4 to 5, 6 to 9, 10 or more

d. very dissatisfied, moderately dissatisfied, slightly dissatisfied, slightly satisfied, moderately satisfied, very satisfied

4.

a. discrete

b. continuous

c. discrete

d. continuous

5.

a. Do the attributes cover all the possibilities without overlapping? Can the attributes be put in a natural order from low to high? Do the attributes form a numeric scale?

b. yes, no (3rd question not asked)

c. yes, yes, no

d. yes, yes, yes

6. ordinal

7. a. interval/ratio

b. nominal

c. ordinal

d. ordinal

e. ordinal

f. interval/ratio

8. a reliability problem because it is concerned with consistency of measurement

9. validity

10.

a. independent variable: distance; dependent variable: degree of fondness

b. independent variable: number of cooks; dependent variable: quality of the broth

11.

a. use of fertilizer

b. plant growth

c. amount of light

12. first, that the two variables are statistically related (covariation); second, that changes in the independent variable preceded changes in the dependent variable (temporal sequence); and third, that the relationship between the two variables is still present when all other variables that might be creating the covariation are controlled (nonspuriousness)

13. Covariation and temporal sequence are established. The researcher must also show that the relationship between social class and self-confidence still exists after other variables that might be creating the relationship have been controlled (nonspuriousness).

14. In a census all elements of a population are measured; in a sample only a subset of the elements in the population are measured.

15.

a. probability

b. non-probability

c. non-probability

d. probability

e. non-probability

16.

a. non-probability sample

b. probability sample

c. census