Quiz: Statistics – 1.1 and 1.2

1. The Colorado State Legislation wants to estimate the length of time it takes residents of Colorado to earn a bachelor’s degree from a state college or university. A random sample of 265 recent in-state graduates were surveyed.

a) Identify the variable.

b) Is the variable quantitative or qualitative?

c) What is the implied population?

2. For the information in parts (a) through (g) below, list the highest level of measurement as ratio, interval, ordinal, or nominal and explain your choice.

a) Name of student.

b) Student identification number.

c) Cumulative grade point average.

d) Dates of awards.

e) Declared major.

f) A number code representing class standing: 1 = Freshmen, 2 = Sophomore, 3 = Junior, 4 = Senior, and 5 = Graduate students

g) Entrance exam rating for competency in English: Excellent, Satisfactory, and Unsatisfactory

3. Identify each of the following samples by naming the sampling techniques used (cluster, convenience, simple random, stratified, and systematic).

a) Over the period of two days, measure the length of time every fifth person coming into a bank waits for teller service.

b) Take a sample of five zip codes from the Cleveland metropolitan region and use every elementary school from each of the zip code regions. Determine the number of students enrolled in first grade in each of the schools selected.

c) Split Internet users into different age groups and then select a random sample from each age group to determine the amount of time they are online each month.

d) Ask five friends for opinions about the student cafeteria.

e) Pick a random sample of students enrolled at your college and determine the number of credit hours they have each accumulated toward their degree program.