

Chapter 3 Practice Quiz

1. A number that describes the population is:

- a. A parameter
- b. A statistic
- c. A proportion
- d. A sample

2. Cheshire High School announces the results of a survey— 31% of the senior class has an mp3 player. The survey was given to a random sample of 100 seniors. What is the population?

- a. The random sample of 100 students
- b. Cheshire High School
- c. The percentage of the senior class who has an mp3 player
- d. The senior class

3. A good sampling method has:

- a. Small bias and small variability
- b. Large bias and small variability
- c. Small bias and large variability
- d. Large bias and large variability

4. By increasing the size of a sample, we can:

- a. Reduce bias
- b. Increase bias

- c. Reduce variability
- d. Increase variability

5. To reduce bias, one needs to:

- a. Increase the sample size
- b. Take multiple samples
- c. Use random sampling
- d. Reduce variability

6. Fill in the blank: Larger samples _____ than smaller samples.

- a. are less biased
- b. are more biased
- c. have less variability
- d. have more variability

7. The conclusion of a confidence statement always refers to:

- a. The population
- b. The sample
- c. The statistic
- d. The parameter

8. If no level of confidence is given in a confidence statement, then:

- a. The confidence statement is not valid.
- b. It is assumed that the level of confidence is 95%.
- c. The margin of error must be between plus and minus 3 percent.

d. The level of confidence satisfies the margin of error.

9. If you want a smaller margin of error with the same confidence:

a. Reduce the size of the sample

b. Increase the size of the sample

c. Use a different method to select the sample.

d. There is no way to reduce the margin of error with the same confidence.

10. True or False: The size of the *population* determines the variability of the statistic from a random sample.

a. True. We must consider the size of the population when we determine the size of the sample.

b. True. Larger populations reduce variability.

c. False. Large populations determine bias, not variability.

d. False. Variability of a sample statistic depends on the size of the sample and not on the size of the population.