Name: _____ Date: _____

BLM 3–16

Chapter 3 Practice Test

1. Is each statement true (T) or false (F)?
- **a)** The heights of a population are an example of a normal distribution.
- **b)** The mean is always a value in a set of data.
- **c)** A set of data can have no mode.
- **d)** Only by surveying the entire population can you draw accurate conclusions.
- **e)** A histogram can be used to display categorical data.

2. Identify the population for each survey.
- **a)** A cotton ball manufacturer wants to determine the average number of cotton balls in each of their large value pack bags.
- **b)** A golf pro shop wants to find out which types of golf shirts they should carry.
- **c)** A pollster wants to know who is likely to win the upcoming mayoral election in Thunder Bay.

3. Jordan is conducting a survey at his school. He wants to choose a sample that is proportional to the number of students in each grade. The table shows the number of students in Jordan's school by grade.

Grade	Number of Students
9	400
10	350
11	450
12	400

- **a)** If he wants to survey a total of 100 students, how many students from each grade should he choose?
- **b)** What type of sampling is Jordan using?

4. Explain the difference between continuous and discrete data. Give an example of each.

5. Can a set of data with an even number of values ever have a median that is a one of the values in the set of data? Explain.

6. Find the mean, the median, the mode, and the range for each set of data.
- **a)** 52, 47, 82, 76, 45, 51, 88, 83, 54, 62
- **b)** 4.5, 4.2, 1.8, 1.1, 4.7, 8.3, 8.8, 9.7, 8.8, 7.1, 7.7, 6.5

7. Find the variance and the standard deviation for the sets of data in question 6.

8. Ms Lee recorded the test scores of the students in her science class.

Test Score	Frequency
under 30	0
[30, 40)	0
[40, 50)	2
[50, 60)	5
[60, 70)	6
[70, 80)	11
[80, 90)	8
[90, 100)	3

- **a)** Display the data using a histogram.
- **b)** What type of distribution does the graph represent?