Name: _____ Date: _____

BLM 2.PT.1

Chapter 2 Practice Test

Multiple Choice

For each question, select the best answer.

1. Which is a primary data source?

A using stock information from the business section of the newspaper
B measuring the heights of students in your class
C using data published in an almanac at the library
D using data collected by Statistics Canada

2. Rebecca wants to find out what Canadian dentists think about a new cleaning procedure. Which is the population for this survey?

A Canadians who have visited the dentist in the last six months
B Canadians who work in a dentist's office
C all Canadians
D all dentists in Canada

3. Extrapolation is

A the process of estimating a value outside the range of the data
B the process of estimating a value between two measurements in a set of data
C drawing a conclusion based on reasoning and the data
D a variable that affects the value of another variable

Short Response

4. Write a hypothesis about the relationship between each pair of variables. Then, state the opposite of each hypothesis.

a) cost of owning a cell phone and number of people who own a cell phone
b) number of pages in the telephone book and length of time required to find a specific entry
c) water consumption and quality of tap water

5. The president of a company wishes to survey a representative sample of its employees.

a) What is the population?
b) Describe how to select a systematic random sample of employees.
c) How could you select a stratified random sample of employees?
d) Suppose the president surveyed the people who work in the offices closest to her. Is this sample likely to be representative of the population?

6. The table compares the age of a tree with the diameter of its trunk.

Age	3	5	6	4	12	8	9	4
Diameter (cm)	9	11	10	9	11	14	13	8

a) Make a scatter plot of the data. Draw a line or curve of best fit.
b) State whether the data show a linear or a non-linear relationship.

Extend

7. This table shows the population of a city from 1935 to 2005.

Year	Population (1000s)
1935	540
1945	610
1955	768
1965	804
1975	819
1985	421
1995	844
2005	856

a) Make a labelled scatter plot of the data.
b) Describe the trend in the population.
c) Identify any outliers. Should any outliers be discarded? Why?
d) Draw a line or curve of best fit.
e) Estimate the population in 1950.