

## Chapter 2 Test

For #1 to #5, select the best answer.

1. Which measure of central tendency should the manager of a shoe store use to order the most common size of shoe?
  - A mode
  - B median
  - C mean or average
  - D trimmed mean
2. For which of the following would the mean be the best measure of central tendency?
  - A the overall mark on a series of chapter tests
  - B the most common shirt size in a grade 10 class
  - C the yearly income that is middle-ranked in a province
  - D the total yearly rainfall in a geographical area
3. A science experiment was done to measure the effect of fertilizer on tree growth. One tree out of the 70 tested did not grow at all, while the rest of the trees nearly doubled in height. Which of the following best describes the data?
  - A Mode is very valuable in this case.
  - B The data set contains an outlier.
  - C The data set shows that one of the trees was diseased.
  - D The data set is not useful.
4. In a stem-and-leaf plot, which forms the leaf?
  - A the ones digit
  - B the tens digit
  - C the ones and greater digit
  - D the tens and greater digit
5. In this data set, which value represents the 70th percentile?  
5, 8, 9, 10, 12, 15, 19, 21, 22, 25
  - A 8
  - B 9
  - C 19
  - D 21
6. Caleb received the following marks in biology.

Course Work	Weighting (%)	Mark (%)
Quiz	10	64
Test 1	15	70
Test 2	15	74
Project	30	81
Exam	30	76

Caleb was pleased that his teacher calculated the mark using a weighted mean. Explain why he was pleased. Show your calculations.

7. Ramon has a summer job at a paper mill. He measures the acidity (pH) in a particular tank and gets the following results: 7.8, 7.9, 7.7, 7.8, 8.0, 0.8, 8.1.
  - a) Find the three measures of central tendency. Round each to the nearest tenth.
  - b) What is the range of the data set?
  - c) Which data value(s) appears to be an outlier(s)?
  - d) Calculate the trimmed mean by removing the highest and lowest values.

