

## CHAPTER 5

### FILL-IN-THE-BLANK ITEMS

#### Introduction

Measures of central tendency are values near the (1) \_\_\_\_\_ of the distribution. The measures discussed in the chapter are the (2) \_\_\_\_\_, the (3) \_\_\_\_\_, and the (4) \_\_\_\_\_.

#### The Mode

The most frequently occurring score is called the (5) \_\_\_\_\_, symbolized by (6) \_\_\_\_\_. The mode is the (7) \_\_\_\_\_ stable of the measures of central tendency. A distribution with two modes is called (8) \_\_\_\_\_, and both values are reported.

#### The Median

The median is the score value at the (9) \_\_\_\_\_ percentile. A (10) \_\_\_\_\_ is the score at or below which a given percentage of the scores lie.

*Locating the median by the counting method: Even number of scores*

In a frequency distribution with an even number of scores, the median will be halfway between the

(11) \_\_\_\_\_ score and the (12) \_\_\_\_\_ score.

*Locating the median by the counting method: Odd number of scores*

If there is an odd number of scores, the median will be the (13) \_\_\_\_\_ score.

### **The Mean, or Arithmetic Average**

The mean or arithmetic average is the sum of the (14) \_\_\_\_\_ divided by the

(15) \_\_\_\_\_ of scores in a distribution. In a frequency distribution, the

(16) \_\_\_\_\_ must be taken into account when the mean is determined. The symbol for the mean of a sample is (17) \_\_\_\_\_, whereas the symbol for the corresponding population parameter is (18) \_\_\_\_\_.

*Rounding conventions*

Rounding rules are as follows:

1. Round your final answer to (19) \_\_\_\_\_.
2. If possible, round only the (20) \_\_\_\_\_ answer.
3. In all preliminary calculations leading up to the final answer, maintain at least (21) \_\_\_\_\_ decimal places.
4. If the digit in the thousandths place is less than 5, (22) \_\_\_\_\_ it and everything that follows it.
5. If the digit in the thousandths place is 5 or more, round the preceding digit (23) \_\_\_\_\_.

*The mean as a balancing point*

The mean is called the (24) \_\_\_\_\_ point in the distribution because the sum of the deviations about it is equal to (25) \_\_\_\_\_.

## Comparing Measures of Central Tendency

The (26) \_\_\_\_\_ is useful for summarizing nominal scale data and for obtaining a rough estimate of the mean and the median. The (27) \_\_\_\_\_ is the best measure of central tendency when a distribution is badly skewed or when there are (28) \_\_\_\_\_ scores. The mean is the most useful of the measures because most other (29) \_\_\_\_\_ procedures are based on it. Also, it is the most (30) \_\_\_\_\_ of the measures from sample to sample. Because the mean shows no systematic tendencies in relation to the population mean, it is called an (31) \_\_\_\_\_ estimate of  $\mu$ .

## Positions of Measures of Central Tendency on a Frequency Polygon

In a unimodal, symmetrical distribution, the mean, median, and mode will all be the (32) \_\_\_\_\_. In skewed distributions, the (33) \_\_\_\_\_ is most affected and is pulled in the direction of the (34) \_\_\_\_\_. The median will be between the (35) \_\_\_\_\_ and the mean in a skewed distribution.

## Troubleshooting Your Computations

The most important thing to remember in locating the measures of central tendency is that your answer should be a value near the (36) \_\_\_\_\_ of the distribution. Also, if you are trying to find the mean in a frequency distribution, you must remember to take the (37) \_\_\_\_\_ into account. To help prevent computational errors, you should perform all computations (38) \_\_\_\_\_, being sure you get the same answer each time.