# PROBABILITY TOPICS: REVIEW PROBLEMS

**Questions 1 – 6 refer to the following study:** In a survey of 100 stocks on NASDAQ, the average percent increase for the past year was 9% for NASDAQ stocks. Match the number to the correct letter.

## **EXERCISE 1**

The "average increase" for all NASDAQ stocks is known as the:

- A. population
- B. statistic
- C. parameter
- D. sample
- E. variable

#### EXERCISE 2

All of the NASDAQ stocks are the:

- A. population
- B. statistic
- C. parameter
- D. sample
- E. variable

#### **EXERCISE 3**

9% is the

- A. population
- B. statistic
- C. parameter
- D. sample
- E. variable

## EXERCISE 4

The 100 NASDAQ stocks in the survey are the:

- A. population
- B. statistic
- C. parameter
- D. sample
- E. variable

## **EXERCISE 5**

The percent increase for one stock in the survey is the:

- A. population
- B. statistic
- C. parameter
- D. sample
- E. variable

#### EXERCISE 6

Would the data collected be qualitative, quantitative – discrete, or quantitative – continuous?

**Questions 7 – 8 refer to the following study:** Thirty people spent two weeks around Mardi Gras in New Orleans. Their two-week weight gain is below. (Note: a loss is shown by a negative weight gain)

Weight Gain	Frequency
-2	3
-1	5
0	2
1	4
4	13
6	2
11	1

# EXERCISE 7

# Calculate:

- a. The average weight gain for the two weeks.
- b. The standard deviation.
- c. The first, second, and third quartiles.

# EXERCISE 8

Construct a histogram and a box plot of the data.