

## DESCRIPTIVE STATISTICS: PRACTICE 2

### STUDENT LEARNING OUTCOMES:

- THE STUDENT WILL CALCULATE MEASURES OF THE CENTER OF THE DATA.
- THE STUDENT WILL CALCULATE THE SPREAD OF THE DATA.

### GIVEN

The population parameters below describe the full-time equivalent number of students (FTES) each year at Lake Tahoe Community College from 1976-77 through 2004-2005. (Source: *Graphically Speaking* by Bill King, LTCC Institutional Research, December 2005).

Use these values to answer the following questions:

- $\mu = 1000$  FTES
- Median = 1014 FTES
- $\sigma = 474$  FTES
- First quartile = 528.5 FTES
- Third quartile = 1447.5 FTES
- $n = 29$  years

### CALCULATE THE VALUES

#### EXERCISE 1

A sample of 11 years is taken. About how many are expected to have a FTES of 1014 or above? Explain how you determined your answer.

#### EXERCISE 2

75% of all years have a FTES:

- a. At or above
- b. At or below

#### EXERCISE 3

THE POPULATION STANDARD DEVIATION =

#### EXERCISE 4

WHAT PERCENT OF THE FTES WERE FROM 528.5 TO 1447.5? HOW DO YOU KNOW?

#### EXERCISE 5

What is the IQR? What does the IQR represent?

#### EXERCISE 6

How many standard deviations away from the mean is the median?