NAME _____ DATE _____ PERIOD _____

Practice

Distributions of Data

1. KENNEL The manager of a kennel records the weights for a sample of dogs currently being housed.

Weight (pounds)
31, 67, 8, 37, 12, 87, 14, 34, 105, 57, 42, 8, 16, 54, 17, 20, 72, 23, 27, 63, 24, 52, 14, 44, 27, 5, 28, 22, 33, 15, 6, 36, 41, 21, 46

a. Use a graphing calculator to create a histogram. Then describe the shape of the distribution.

b. Describe the center and spread of the data using either the mean and standard deviation or the five-number summary. Justify your choice.

2. CAMP The enrollment for a biannual computer camp over the past 15 years is shown.

Number of Participants
45, 68, 55, 25, 48, 36, 61, 52, 31, 8, 41, 58, 40, 55, 68, 47, 60, 28, 44, 63, 18, 68, 50, 57, 37, 16, 56, 40, 50, 68

a. Use a graphing calculator to create a box-and-whisker plot. Then describe the shape of the distribution.

b. Describe the center and spread of the data using either the mean and standard deviation or the five-number summary. Justify your choice.

3. TEMPERATURES The monthly average low temperatures for two cities are shown.

Astoria, OR
36, 51, 37, 42, 54, 39, 53, 42, 46, 38, 50, 47

Boston, MA
22, 57, 46, 24, 31, 41, 64, 50, 28, 59, 65, 38

a. Use a graphing calculator to construct a box-and-whisker plot for each set of data. Then describe the shape of each distribution.

b. Compare the distributions using either the means and standard deviations or the five-number summaries. Justify your choice.