9-4

Word Problem Practice

Measures of Central Tendency and Range

ANIMALS For Exercises 1–4, use the information in the table below that shows the lifespan of selected mammals. Round to the nearest tenth if necessary.

Mammal	Average Lifespan
Baboon	20 yr
Camel	12 yr
Chimpanzée	20 yr
Cow	15 yr
Goat	8 yr
Gorilla	20 yr
Moose	12 yr
Pig	10 yr

FOOTBALL For Exercises 5 and 6, use the information in the table below. Round to the nearest tenth if necessary.

Team	Games Won
Atlanta	11
Carolina	7
Denver	10
Kansas City	7
New Orleans	8
Oakland	5
St. Louis	8
San Diego	12
San Francisco	2
Seattle	9

- 1. Explain how to find the mean of the lifespans listed in the table. Then find the mean.
- **2.** Explain how to find the median of the set of data. Then find the median.

- 3. Explain how to find the mode of the set of data. Then find the mode.
- 4. Which measure of central tendency is most representative of the data? Explain.
- 5. What are the mean, median, mode, and range of the number of games won by the teams in the table?
- **6.** Which measure of central tendency is most representative of the data? Explain.

9-5

Word Problem Practice

Measures of Variation

FOOTBALL For Exercises 1-4, use the table below that shows the winning scores in the Super Bowl from 1994 through 2005.

			Winnin	g Sup	er Bow	I Scor	es, 199	4-2005			-
1994	1995.	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
30	49	27	35	31	34	23	-34	20	48	32	-24

- 1. Explain how to find the range of the data. Then find the range.
- 2. Find the median, the upper and lower quartiles, and the interquartile range of the winning scores.

- 3. Describe how to find the limits for outliers. Then find the limits.
- 4. Are there any outliers among the winning Super Bowl scores? If so, what are they? Explain your reasoning.

GRADES For Exercises 5 and 6, use the stem-and-leaf plot at the right showing the scores on the midterm exam in English.

Stem	Leaf	
7	57	
8	01456899	
9	7 7 5 =	75

- **5.** Find the range, median, upper and lower quartiles, and the interquartile range of the exam scores.
- **6.** Are there any outliers in this data? Explain your reasoning.

