24. WEATHER The graph shows the average rainfall (in centimeters) for New York's Central Park during each month of the year. Find the mean, median, mode, range, and standard deviation of the rainfall amounts in centimeters and in inches. (*Note:* 1 centimeter \approx 0.3937 inch.)



25. CHALLENGE A company has 5 executives, 15 supervisors, and 80 production workers. The salary ranges are \$100,000-\$140,000 for the executives, \$60,000-\$90,000 for the supervisors, and \$30,000-\$50,000 for the production workers. The mean of all the salaries is \$49,500, and the median is \$42,000. Each supervisor gets a \$5000 raise and no one else gets a raise. What are the new mean and median? *Explain*.



QUIZ for Lessons 11.1–11.2

Find the mean, median, mode, range, and standard deviation of the data set. (p. 744)

- **1.** 8, 5, 5, 9, 11, 15, 7, 11, 16
- 2. 10, 10, 20,
- **3.** 56, 45, 48, 47, 56, 55, 43, 44
- **5.** 145, 181, 163, 150, 158, 172, 159
- **2.** 18, 19, 23, 17, 19, 15, 14, 24, 21
- **4.** 67, 70, 73, 68, 71, 73, 74, 73, 70
- **6.** 246, 231, 261, 244, 250, 232, 246, 258
- **7. DIGITAL CAMERAS** The data set below gives the original prices of nine different digital cameras at an electronics store. The store is offering a promotion in which all digital cameras ordered online are 20% off. Find the mean, median, mode, range, and standard deviation of the original prices and of the sale prices. (*p. 751*)

\$120, \$130, \$150, \$180, \$230, \$280, \$320, \$320, \$350