**CheckPoint:** Ch. 8

* *Resources:* Ch. 8 in *Basic Mathematical Skills with Geometry* (6th ed.)
* **Due Date:** Day 5 /**Individual** newsgroup
* **Complete** the following exercises. Show your work without using a calculator. Checking your answer on a calculator is a best practice.

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| **Section of *Basic Mathematical Skills with Geometry* (6th ed.)** | **Page Numbers** | **Exercises**  |
| Section 8.1 | pp. 600-602 | 14, 18, 20, 24, 36 |
| Section 8.2 | p. 612 | 2, 4, 6, 8, 10 |
| Section 8.3 | pp. 623-624 | 6, 8, 10 |
| Section 8.4 | pp. 633-634 | 2, 6, 10, 14 |
| Section 8.5 | pp. 641-646 | 4, 20, 38 |

Find the median of each set of numbers.

**14.** 1, 4, 9, 15, 25, 36

Find the mode of each set of numbers.

**18.** 41, 43, 56, 67, 69, 72

**20.** 9, 8, 10, 9, 9, 10, 8

Solve the following applications.

**24. Statistics.** A salesperson drove 238, 159, 87, 163, and 198 miles (mi) on a 5-day

trip. What was the mean number of miles driven per day?

**36. Business and finance.** The following scores were recorded on a 200-point final examination:

193, 185, 163, 186, 192, 135, 158, 174, 188, 172, 168, 183, 195, 165, 183.

**(a)** Find the mean final examination score.

**(b)** Find the median final examination score.

**(c)** Is the mean or median a more useful representative of the final examination

scores? Write a brief paragraph justifying your response.

Use the world population and land area table in the text for exercises 1 to 10. Round

answers to the nearest tenth or tenth of a percent. **(see page 606)**

**2. (a)** What is the population of Europe in 2000?

**(b)** What is the total area of Europe?

**4.** Compare the population per square mile in Asia to the population per square mile

in North America for the year 2000.

**6.** What is the percent increase in the population for all six inhabited continents,

excluding Asia, from 1950 to 2000?

**8.** What was the percent increase in the population in South America from 1900 to

2000?

**10. (a)** What was the mean population of the six continents or land masses that were

habitable in 2000?

**(b)** What was the mean population in 1950?

**(c)** What was the percent increase in the mean population from 1950 to 2000?

Use the graph below, showing the number of robberies in a town during the last 6 months

of a year, for exercises 5 to 8. **(See page 623)**

**6.** How many robberies occurred in November?

**8.** What was the mean number of robberies per month over the last 6 months?

**10.** The graph and table below give the monthly principal and interest payments for

a mortgage from 1999 to 2004. Use this information to predict the payment for

2005. **(see page 624)**

**2.** The table below gives the median earnings of women aged 25 and older who work

full-time, year round, by educational attainment, according to the 2000 census.

**(SEE PAGE 233)**

The following pie chart shows the budget for a local company. The total budget is $600,000.

Find the amount budgeted in each of the following categories. (SEE PAGE 233)

**6.** Operating expenses

The following pie chart shows the distribution of a person’s total yearly income of $24,000.

Find the amount budgeted for each category. (SEE PAGE 233)

**10.** Utilities

**14.** The following table gives the number of Senate members with military service in

the 106th U.S. Congress, by branch. (SEE PAGE 634)

Find the median of each set of numbers.

**4.** 26, 30, 38, 67, 59, 21, 17, 85, 22, 22

Give the five-number summary of each set of numbers.

**20.** 7, 7, 5, 4, 1, 9, 8, 8, 8, 5, 2

One measure used to describe a data set is the **range.** The range of a data set is given by the

difference between the max and the min of the set. The range describes the variability of the

data (that is, how much do the numbers vary).

**38.** 7, 7, 5, 4, 1, 9, 8, 8, 8, 5, 2