

## 5-2 Buy or Sell a Car

### Exercises

- Find the mean, median, mode, and range for each data set given.
  - 5, 4, 6, 7, 6, 7, 8, 7
  - 112, 122, 132, 142, 152
  - 34, 56, 44, 200
  - 88, 76, 99, 71, 80
- Billy is looking to sell his Camaro. He compiles these prices from the newspaper for cars just like his: \$2,000; \$19,900; \$18,100; \$17,500; and \$20,000.
  - Why is it more reasonable for Billy to use the median, rather than the mean, to get a reasonable estimated price for his car?
  - What is the difference between the mean and the median?
- The following automobile prices are listed in descending order:  $a, b, c, d, x, y,$  and  $w$ . Express the difference between the median and the mean of these prices algebraically.
- A local charity wants to purchase a classic 1956 Thunderbird for use as a prize in a fundraiser. They find the following eight prices in the paper.

\$48,000	\$57,000	\$31,000	\$58,999
\$61,200	\$59,000	\$97,500	\$42,500

  - What is the best measure of central tendency to use to get a reasonable estimate for the cost of the car? Explain.
  - What is the range?
- Carol has taken three tests this quarter in her Financial Algebra class. Her grades for the three tests were 91, 81, and 78. What grade does she need on the fourth test to have an 85 test average?
- Find the value of  $x$  that will make the mean of the following data set equal to 80.  
78, 90, 88, 70,  $x$
- Create an original set of five numbers with mean 20.
- Create an original set of five numbers such that the lowest number is 10, the highest is 50, and the mean is 20.



