## **Chapter 8**

## Chapter Self-Test

- A biologist is studying gulls. He measured and recorded these wingspans, in centimetres:
   132, 145, 162, 135, 142, 122, 138, 124, 135, 140, 128, 122, 145, 138, 139, 122, 146, 150, 167, 128, 134, 147, 151, 122 Determine the range and mean of these wingspans.
- 2. Determine the median and mode of each set of data.
  a) 43, 49, 46, 47, 42, 39, 52, 41, 44
  b) 135, 148, 168, 154, 148, 152, 169, 170
- **3.** The median of a set of data is 10. Does 10 have to be one of the values in the set? Use an example to support your answer.
- **4.** Does every set of data have a mode? Use an example to support your answer.
- **5.** Jonathan's scores for seven bowling games are 110, 120, 134, 126, 132, 124, and 122. What score does he need on the eighth game to keep the same mean score?
- 6. Consider this set of data: 525, 575, 495, 63, 450, 560, 500. Which of the following values would change the mean by the greatest amount if it were added to the set? Explain.
  A. 1500
  B. 499
  C. 1
- **7. a)** Determine the median, mean, and mode of the Calgary June temperatures.
  - **b)** Joan says that the average temperature for June was 33 °C. Did she use the median, mean, or mode?
  - **c)** Which measure do you think represents the data the best? Explain.

## What Do You Think Now?

Revisit What Do You Think? on page 335. How have your answers and explanations changed?

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		emper	rature	s in Ju	ne	
	19°C	22°C	18°C	23°C	21°C	
	20°C	20°C	18°C	21°C	24°C	
	25°C	24°C	27°C	28°C	26°C	
	24°C	25°C	26°C	27°C	25°C	
	26°C	27°C	30°C	31°C	33°C	
	33°C	33°C	30°C	33°C	27°C	
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