Additional Practice

Investigation 2

Data About Us

1. The members of the drama club sold candy bars to help raise money for the school's next play. The stem-and-leaf plot below shows how many candy bars each member of the drama club sold.

Candy Bars Sold by Drama Club

- **a.** How many students are in the drama club?
- **b.** How many students sold 25 or more candy bars?
- **c.** How do the numbers of candy bars sold by each student vary?
- **d.** What is the typical number of candy bars sold by each student?
- **2.** Earl rolls 6 six-sided number cubes and finds the sum of the numbers rolled.
 - **a.** What are the least and greatest sums Earl can roll? Explain.
 - **b.** What do your answers for part (a) tell you about the sums Earl can roll?
 - **c.** Earl rolled the number cubes several times and recorded each sum. Here are Earl's results:

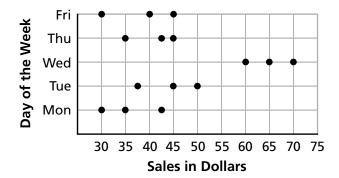
d. Using your stem plot, find the typical sum rolled. Use the median and range to explain your reasoning.

Additional Practice (continued)

Investigation 2

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3. Taryn and Travis work in the student store at their school. They made the coordinate graph below to show the total sales each day for three weeks. There are three points corresponding to each weekday because Taryn and Travis recorded their data for the three weeks on a one-week graph.



- **a.** What were the total sales on Tuesdays for the three weeks Taryn and Travis collected their data?
- **b.** Which day of the week seems to be the best for sales at the student store? Explain your reasoning.
- **c.** Which day of the week varies the most for total sales? Explain.
- **d.** How do the sales for the entire three-week period vary?
- **e.** What is the median of the total sales for Fridays? What is the median of the total sales for the three weeks Taryn and Travis collected data?
- **f.** Describe the pattern of sales during a typical week at the student store.

Additional Practice (continued)

Investigation 2

Data About Us

- **4.** Emily rolled two four-sided number cubes 12 times and computed the sum for each roll. She recorded the results as ordered pairs. The first coordinate is the number of the roll, and the second coordinate is the sum for that roll. For example, (9, 2) means that on her ninth roll Emily rolled a sum of two. The results of Emily's rolls were: (1, 7), (2, 8), (3, 3), (4, 4), (5, 6), (6, 3), (7, 5), (8, 6), (9, 2), (10, 4), (11, 5), (12, 5).
 - **a.** Make a coordinate graph of Emily's data. Use the horizontal axis for the number of the roll and the vertical axis for the result.

- **b.** What is the mode of the sums of Emily's rolls? Explain.
- **c.** How do the sums vary?
- **d.** What is the median of the sums? Explain.
- **e.** Does the coordinate graph you made in part (a) show a pattern in Emily's number-cube rolls? Explain.

For Exercises 5–7, use the stem-and-leaf plot below.

Students' Foot Lengths

- **5.** How many students are in the class?
 - **A.** 3
- **B.** 12
- **C.** 30
- **D.** 33

- **6.** How do the foot lengths for this class vary?
 - **F.** 1 to 3
- **G.** 7 to 2
- **H.** 17 to 32
- **J.** 20 to 28

- **7.** What is the median foot length for this class?
 - **A.** 2
- **B.** 20
- **C.** 22
- **D.** 24.5