

**UNIT 6 • DESCRIBING DATA****Lesson 1: Summarizing, Representing, and Interpreting Data on a Single Measurement Variable****Practice 6.1.1: Representing Data Visually****A**

Use the given information to complete problems 1–5.

Dora is a long jumper. Each time she participates in an official competition, she records the number of jumps she makes that are more than 16 feet long. Use the data in the table to solve the problems.

Competition	Number of jumps more than 16 feet	Competition	Number of jumps more than 16 feet
1	2	10	0
2	0	11	4
3	1	12	3
4	0	13	3
5	3	14	3
6	4	15	5
7	0	16	6
8	5	17	2
9	2	18	6

1. Create a dot plot showing the number of times Dora jumped more than 16 feet in each competition.
2. What is the median number of times Dora jumped more than 16 feet?
3. Find the minimum, maximum, first quartile, and third quartile of the data set.
4. Create a box plot showing the number of times Dora jumped more than 16 feet.
5. Dora wants to analyze her performance using this data. She wants to understand the range of her data and the frequency of different results. Which graph will be most useful to Dora, the dot plot or the box plot? Explain.

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**UNIT 6 • DESCRIBING DATA****Lesson 1: Summarizing, Representing, and Interpreting Data on a Single Measurement Variable**

Use the given information to complete problems 6–10.

Risa is a nurse. She weighs patients when they come to the clinic for their appointment. A nearby university is collecting data for a study. They request anonymous data on the weights of 25-year-old women. The table shows the weights of 20 women who are 25 years old, rounded to the nearest 10 pounds. Use the data in the table to solve the problems.

Weight (lbs)	Weight (lbs)
140	120
230	130
170	150
190	200
170	140
120	140
150	110
250	230
190	190
140	120

6. Create a histogram for this data set.
7. What is the median of the data set?
8. Find the minimum, maximum, first quartile, and third quartile of the data set.
9. Create a box plot for this data set.
10. The university wants to understand the center and spread of this data in order to have a better idea of the weight of the typical 25-year-old woman. Which graph would be most useful for this purpose? Explain.