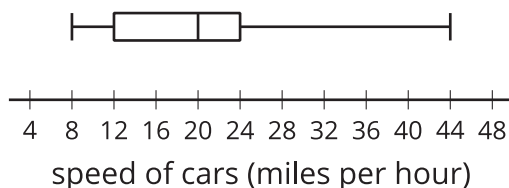# Lesson 3 Practice Problems

1. The box plot represents the distribution of speeds, in miles per hour, of 100 cars as they passed through a busy intersection.


speed of cars (miles per hour)

    a. What is the smallest value in the data set? Interpret this value in the situation.

    b. What is the largest value in the data set? Interpret this value in the situation.

    c. What is the median? Interpret this value in the situation.

    d. What is the first quartile (Q1)? Interpret this value in the situation.

    e. What is the third quartile (Q3)? Interpret this value in the situation.

2. The data set represents the number of eggs produced by a small group of chickens each day for ten days: 7, 7, 7, 7, 7, 8, 8, 8, 8, 9. Select **all** the values that could represent the typical number of eggs produced in a day.
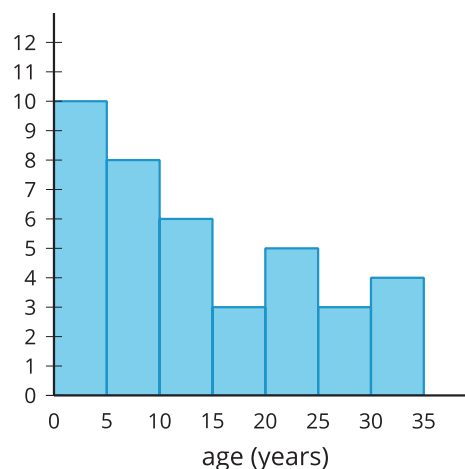
   A. 7.5 eggs

   B. 7.6 eggs

   C. 7.7 eggs

   D. 8 eggs

   E. 9 eggs

3. The dot plot displays the lengths of pencils (in inches) used by students in a class. What is the mean?

length (inches)
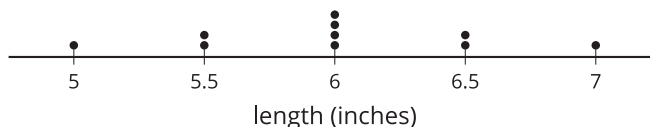
(From Unit 1, Lesson 2.)

4. The histogram represents ages of 40 people at a store that sells children's clothes. Which interval contains the median?

age (years)

   A. The interval from 0 to 5 years.

   B. The interval from 5 to 10 years.

   C. The interval from 10 to 15 years.

   D. The interval from 15 to 20 years.

(From Unit 1, Lesson 2.)

5. The data set represents the responses, in degrees Fahrenheit, collected to answer the question "How hot is the sidewalk during the school day?".

92, 95, 95, 95, 98, 100, 100, 100, 103, 105, 105, 111, 112, 115, 115, 116, 117, 117, 118, 119, 119, 119, 119, 119, 119

    a. Create a dot plot to represent the distribution of the data.

    b. Create a histogram to represent the distribution of the data.

    c. Which display gives you a better overall understanding of the data? Explain your reasoning.

(From Unit 1, Lesson 2.)

6. Is "What is the area of the floor in this classroom?" a statistical question? Explain your reasoning.

(From Unit 1, Lesson 1.)