Lesson 7 Practice Problems

1. Write a formula you could type into a spreadsheet to compute the value of each expression.

    a. $(19.2) \cdot 73$

    b. 1.1^5

    c. $2.34 \div 5$

    d. $\frac{91}{7}$

2. A long-distance runner jogs at a constant speed of 7 miles per hour for 45 minutes. Which spreadsheet formula would give the distance she traveled?

    A. = 7 * 45

    B. = 7 / 45

    C. = 7 * (3 / 4)

    D. = 7 / (3 / 4)

3. In a right triangle, the lengths of the sides that make a right angle are 3.4 meters and 5.6 meters. Select **all** the spreadsheet formulas that would give the area of this triangle.

    A. = 3.4 * 5.6

    B. = 3.4 * 5.6 * 2

    C. = 3.4 * 5.6 / 2

    D. = 3.4 * 5.6 * (1/2)

    E. = (3.4 * 5.6) / 2

4. This spreadsheet should compute the total ounces of sparkling grape juice based on the number of batches, ounces of grape juice in a single batch, and ounces of sparkling water in a single batch.

	A	B
1	number of batches	4
2	ounces of grape juice in 1 batch	3
3	ounces of sparkling water in 1 batch	7
4	total ounces	

a. Write a formula for cell B4 that uses the values in cells B1, B2, and B3, to compute the total ounces of sparkling grape juice.

b. How would the output of the formula change if the value in cell B1 was changed to 10?

c. What would change about the sparkling grape juice if the value in B3 was changed to 10?
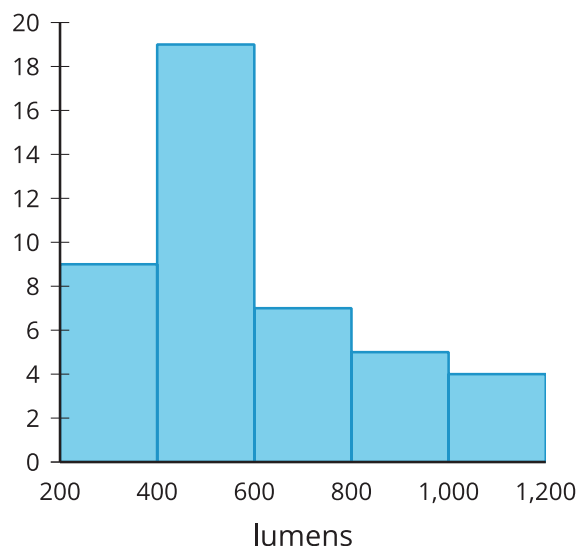
5. The dot plot and the box plot represent the same distribution of data.
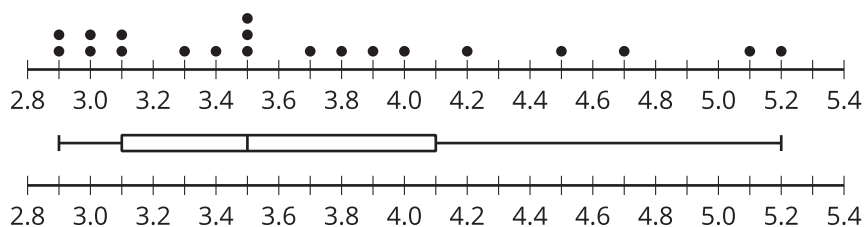
a. How does the median change when the highest value, 5.2, is removed?

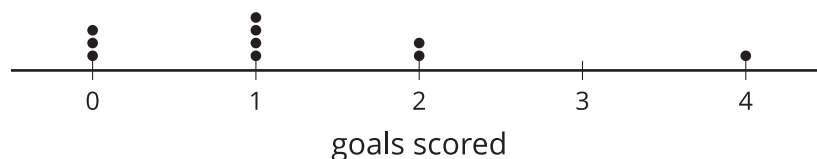b. How does the IQR change when the highest value, 5.2, is removed?

(From Unit 1, Lesson 5.)

6. Describe the shape of the distribution shown in the histogram which displays the light output, in lumens, of various light sources.

(From Unit 1, Lesson 4.)

7. The dot plot represents the distribution of the number of goals scored by a soccer team in 10 games.

a. If possible, find the mean. If not possible, explain why not.

b. If possible, find the median. If not possible, explain why not.

c. Did the soccer team ever score exactly 3 goals in one of the games?

(From Unit 1, Lesson 2.)