Module 2 Confirmation Test Review

1. Kerri has decided she would like to buy a new MP3 player for $149.99, but she doesn’t keep her checkbook up-to-date very well, so she is not sure if she can afford to spend the money. The most recent balance she is showing in her checkbook is $125.86. Since then, she has written checks for $235, $24.56, $31.67, and $65.80. She only made one deposit of $350.00.

   a. How much is remaining in her checking account?
   
   b. Does she have enough to buy the player?
   
   c. If she went ahead and bought the player with 9.25% tax added, what will her balance be after the purchase?

2. Of the 24 auditions that Wanda attended, she was awarded 3 parts.

   a. Write the ratio of the number of parts she was awarded to the number of auditions she attended in simplest form.
   
   b. What is the ratio of the number of parts she did not get to the total number of auditions she attended?

3. Suppose you are training to run a half marathon, approximately 13 miles. You have been working toward this goal for about three months and are able to run 5 miles in 40 minutes. If you continue at this pace for the remainder of your training, how long should it take you to run the half marathon?

4. A school reported that 141 students were absent due to illness. The school has an enrollment of 940 students. What percentage of students were home sick?

5. In laboratory testing, a company claimed that its cleaning product was 95% effective at treating stains. On its website, the company listed 19 success stories in laboratory testing. How many stains did the company treat during the lab testing?
6. Write \( \frac{14}{35} \) as a percent.

7. Write 0.582 in simplified fraction form.

8. A rectangular flower bed measures 12.3 meters by 6.7 meters. What is the area of the bed? (round to the nearest tenth of a meter)

9. The amount of rainfall in inches for each month in Knoxville in the year 2004 is listed:

   JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEPT   OCT   NOV   DEC
   2.74  3.63  4.61  2.73  5.35  7.90  7.62  2.18  4.79  3.10  6.01  5.56

   a. Find the mean monthly rainfall for the year:
   b. Find the median monthly rainfall for the year:
   c. Find the mode of the data:
   d. Find the range of the data:

10. A telephone pole is 40 feet tall and casts a shadow 9 feet long. A standard stop sign casts a shadow that is 1.8 feet long. How tall is the stop sign?
1. a) $118.83  
    b) no  
    c) -$45.03

2. a) $\frac{1}{8}$  
    b) $\frac{7}{8}$

3. 104 minutes (1 hour 44 minutes)

4. 15%

5. 20 stains

6. 40%

7. $\frac{291}{500}$

8. 82.4 square meters

9. a) 4.685 inches  
    b) 4.7 inches  
    c) no mode  
    d) 5.72 inches

10. 8 feet