TEST NAME: **Unit Rates and Ratios**
TEST ID: **737570**
GRADE: **07 - Seventh Grade**
SUBJECT: **Mathematics**
TEST CATEGORY: **Shared Classroom Assessments**

Student: _____

Class: _____

Date: _____

1. A certain laundry detergent recommends $\frac{1}{4}$ cup of detergent for a $\frac{1}{2}$ load of clothes. How much detergent is recommended for 4 loads of clothes?

   A. 1 cup

   B. 2 cups

   C. 4 cups

   D. 8 cups

2. A plant grew $3\frac{1}{4}$ inches over a $6\frac{1}{2}$-month period. What was the average monthly growth rate for the plant?

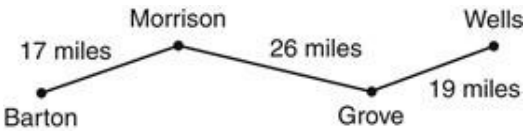
   A. $\frac{1}{2}$ inch per month

   B. 2 inches per month

   C. $3\frac{1}{4}$ inches per month

3. At a gas station, Lora took $\frac{1}{6}$ minute to fill $\frac{3}{5}$ gallon of gas. At this rate, how many gallons of gas could Lora fill in 1 minute? Use a mixed number to express your answer.

4. **Daniel rode his bicycle from Barton to Wells along the path shown on this map.**



If it took Daniel 5 hours to complete the trip, what was his average speed in miles per hour?

   A. 3.4

   B. 8.6

   C. 11.2

   D. 12.4

5. Paul used $1\frac{1}{4}$ gallons of paint to cover $\frac{3}{8}$ of the walls in his living room. How many gallons of paint will Paul need to paint all the walls in his living room?

A. $3\frac{1}{3}$ gallons

B. 3 gallons

C. 2 gallons

D. $1\frac{1}{2}$ gallons

6. **In 1980, the temperature changed from -32 degrees to 15 degrees in 7 minutes at Great Falls International Airport in Montana. Which statement best describes this change?**

A. The temperature increased $\frac{7}{47}$ degree per minute.

B. The temperature increased $\frac{15}{47}$ degree per minute.

C. The temperature increased $\frac{32}{15}$ degrees per minute.

D. The temperature increased $\frac{47}{7}$ degrees per minute.

7. Kevin purchased $165\frac{1}{3}$ ft^2 of hardwood floor to install in his living room. This amount covered $\frac{3}{4}$ of the room. How many square feet of flooring will cover Kevin's living room floor?

A. $206\frac{7}{12}$ ft^2

B. $220\frac{4}{9}$ ft^2

C. $238\frac{2}{3}$ ft^2

D. $289\frac{1}{3}$ ft^2

8. Mr. Rogers needs fertilizer for his 1-acre garden. The package suggests $\frac{1}{2}$ pound of fertilizer for $\frac{1}{45}$ of an acre. How many pounds of fertilizer does Mr. Rogers need for his entire garden?

A. $11\frac{1}{4}$

B. $22\frac{1}{2}$

C. 45

D. 90

9. **A hiker climbs a 5-mile trail up a mountain in 2 hours. On the return trip downhill, she walks the same trail and returns to her starting point in 1 hour. What was her average rate of speed, in miles per hour, for the entire trip?**

A. $\frac{3}{5}$

B. $1\frac{2}{3}$

C. $3\frac{1}{3}$

D. $3\frac{1}{2}$

10. Doug drove $253\frac{1}{2}$ miles in $4\frac{1}{2}$ hours. How many miles did Doug average per hour?

A. $50\frac{4}{5}$ miles per hour

B. $56\frac{1}{3}$ miles per hour

C. $63\frac{1}{4}$ miles per hour