Name _____ Date _____

Unit Rates with Fractions: Complex Fractions in Context

Directions: Answer each question. When you type an answer, use digits and a decimal point only.

1. Lucia swims 1 1/2 laps in 3/4 minute at a steady pace. How many laps does she swim per minute?

_____ laps per minute

2. A painter uses 2/3 gallon of paint to cover 250 square feet of wall. At this rate, what area does 1 gallon cover?

_____ square feet

3. A runner covers 3/4 mile in 6 minutes at a steady pace. How many minutes does it take her to run 1 mile?

_____ minutes

4. A hiker climbs 2/3 mile up a steep trail in 1/2 hour at a steady pace. What is her speed in miles per hour?

A. 3/4 mile per hour
B. 1 1/3 miles per hour
C. 2/3 mile per hour
D. 1/3 mile per hour

5. A trail mix recipe uses 3/4 cup of peanuts for every 1/2 cup of raisins. Find the number of cups of peanuts per cup of raisins. Type your answer as a decimal.

_____ cups of peanuts per cup of raisins

6. Lena paints 2/5 of a fence in 1/2 hour at a steady pace. At this rate, how long will it take her to paint the whole fence?

A. 1/5 hour
B. 1 1/4 hours
C. 4/5 hour
D. 2 1/2 hours

7. Store A sells 3/4 pound of almonds for $6. Store B sells 1 1/4 pounds of almonds for $9. One store charges less per pound. How much less per pound does it charge, in dollars?

_____ dollars per pound

8. Tomas mows 5/6 acre of lawn in 3/4 hour at a steady pace. He wants to know how many acres he mows per hour. His work is shown.

1. Acres per hour $= 5/6 \div 3/4$
2. $5/6 \div 3/4 = 6/5 \times 3/4$
3. $6/5 \times 3/4 = 18/20$
4. $18/20 = 9/10$

Which step has the first mistake?

A. Acres per hour $= 5/6 \div 3/4$
B. There is no mistake.
C. $5/6 \div 3/4 = 6/5 \times 3/4$
D. $18/20 = 9/10$
E. $6/5 \times 3/4 = 18/20$