Name _____ Date _____

Unit Rates: How Much for One?

Directions: A unit rate tells how much of one quantity goes with 1 of another, such as the miles for 1 hour or the dollars for 1 pound. Check which quantity each problem wants for 1 of the other. Type a money answer as a number without the dollar sign.

1. Six notebooks cost $18 in all, and each notebook costs the same amount. What is the price of 1 notebook?

_____ dollars

2. A cyclist rides 45 miles in 3 hours at a steady speed. How many miles does the cyclist ride in 1 hour?

_____ miles

3. A store sells 4 pounds of grapes for $10, and every pound costs the same. Two students find the price of 1 pound.

- Imani divides 10 ÷ 4 and says the grapes cost $2.50 per pound.
- Diego divides 4 ÷ 10 and says the grapes cost $0.40 per pound.

Whose unit price is correct, and why?

A. Neither, because the price of 1 pound is $6.

B. Diego's, because the smaller number is always divided by the larger number.

C. Both, because $2.50 per pound and $0.40 per pound are the same rate.

D. Imani's, because dividing the $10 by the 4 pounds gives the dollars for each pound.

4. A printer prints 80 pages in 4 minutes at a steady rate. Which statement gives a unit rate for the printer?

A. The printer prints 76 pages per minute.

B. The printer takes 20 minutes to print each page.

C. The printer prints 320 pages per minute.

D. The printer prints 20 pages per minute.

5. A rice recipe uses 2 cups of rice for every 5 cups of water. How much rice does the recipe use for each cup of water?

A. 2/5 cup B. 5/2 cups C. 3 cups D. 10 cups

6. A 5-pound bag of oranges costs $6. At that price, what is the cost of 1 pound of oranges?

_____ dollars

7. A hose puts 30 gallons of water into a tub in 6 minutes at a steady rate. Which pair of unit rates describes the hose?

A. 1/5 gallon per minute and 5 minutes per gallon

B. 5 gallons per minute and 1/5 minute per gallon

C. 5 gallons per minute and 5 minutes per gallon

D. 24 gallons per minute and 1/24 minute per gallon

8. Store A sells 5 pens for $10. Store B sells 8 pens for $12. At each store, every pen costs the same amount. How much more does 1 pen cost at Store A than at Store B?

_____ dollars

9. Which of these prices are the same rate as $3 per pound? Select the two prices that match.

☐ A. $2 for 6 pounds ☐ B. $3 for 3 pounds ☐ C. $15 for 5 pounds

☐ D. $6 for 2 pounds ☐ E. $9 for 6 pounds

10. A machine fills 150 bottles in 5 minutes at a steady rate. How many bottles does it fill in 8 minutes?

_____ bottles