

Rate of Change and Unit Rate

Score _____ Per _____

1. What is a rate of change? _____
_____2. What is a unit rate? _____

3. Mrs. Woodfield makes 15 cakes in 5 hours.

a. Write her rate as a ratio: _____

b. What is her unit rate?

_____ cakes per hour

4. Ms. Heaton travels 15 miles in 20 minutes.

a. Write her rate as a ratio: _____

b. What is her unit rate?

_____ miles per minute

5. Mr. Shaffer hits 75 baseballs in 6 hours.

a. Write his rate as a ratio: _____

b. What is his unit rate?

_____ baseballs per hour

6. Mrs. Helquist takes 7 hours to tune 42 violins.

a. Write her rate as a ratio: _____

b. What is her unit rate?

_____ violins per hour

7. Mr. Hobbs paints 5 paintings in 20 days.

a. Write his rate as a ratio: _____

b. What is his unit rate?

_____ paintings/day

8. Mrs. Standing cycles 75 miles in 5 hours.

a. Write her rate as a ratio: _____

b. What is her unit rate?

_____ mi/hr

9. Mrs. Rowley takes 3 hours to grade 240 papers.

a. Write her rate as a ratio: _____

b. What is her unit rate?

_____ papers/hour

10. Mrs. Steele buys 8 lbs of baby food for \$6.50

a. Write her rate as a ratio: _____

b. What is the unit rate?

\$ _____/lb

11. You are shopping at Allen's for Gatorade. Deal A has a 15 oz. bottle for \$0.89, while Deal B has a 32 oz. bottle for \$1.52.

- a. What is the unit rate of Deal A, the 15 oz. bottle? \$_____ per oz.
- b. What is the unit rate of Deal B, the 32 oz. bottle? \$_____ per oz.
- c. Which is the better deal?_____ How much cheaper is it per oz.? _____

12. Jex runs the 200 m. dash in 38 seconds. Coach Lines runs the 400 m. dash in a minute and 5 seconds flat.

- a. What is the unit rate of Jex's speed? _____ m/sec
- b. What is the unit rate of Coach Lines' speed? _____ m/sec
- c. Who is faster? _____ By how many meters per second? _____

13. You are shopping for school supplies. Pencils-R-Us has 10 pencils for \$4.00, and Pencils.com has 6 pencils for \$2.70.

- a. What is the unit rate of Pencils-R-Us? \$_____/pencil
- b. What is the unit rate of Pencils.com? \$_____/pencil
- c. Which is a better deal? _____ How much cheaper is it per pencil? _____

14. Mr. Gerke needs to purchase some sugar. He can't decide which is better: Deal A is a 4.4 lb. bag of sugar for \$2.35, or Deal B is a 10 lb. bag of sugar for \$4.99.

- a. What is the unit rate of the 4.4 lb bag? \$_____ per lb.
- b. What is the unit rate of the 10 lb bag? \$_____ per lb.
- c. Which is a better deal?_____ How much cheaper is it per pound?_____