

Unit Rates - CENTER #5

1. Brandon enters bike races. He bikes $8\frac{1}{2}$ miles every $\frac{1}{2}$ hour. Complete the table to find how far Brandon bikes for each time interval.

Distance (mi)	$8\frac{1}{2}$				
Time (h)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$

Simplify each complex fraction.

2. $\frac{\frac{3}{4}}{\frac{2}{3}} =$ _____

3. $\frac{\frac{1}{2}}{\frac{5}{8}} =$ _____

4. $\frac{\frac{4}{5}}{\frac{2}{3}} =$ _____

5. $\frac{\frac{6}{7}}{\frac{1}{7}} =$ _____

Find each unit rate.

6. Julio walks $3\frac{1}{2}$ miles in $1\frac{1}{4}$ hours.

7. Kenny reads $\frac{5}{8}$ page in $\frac{2}{3}$ minute.

8. Marcia uses $\frac{3}{4}$ cup sugar when she halves the recipe.

9. Sandra tiles $\frac{5}{4}$ square yards in $\frac{1}{3}$ hour.

Use the information for two cell phone companies to solve Exercises 10–14.

10. What is the unit rate for On Call?

11. What is the unit rate for Talk Time?

On Call 3.5 hours: \$10	Talk Time $\frac{1}{2}$ hour: \$1.25
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12. Determine which of the companies offers the best deal. Explain your answer.

13. Another company offers a rate of \$0.05 per minute. How would you find the unit rate per hour?

14. Is the company in Exercise 13 a better deal than On Call or Talk Time?
