

Name \_\_\_\_\_

Date \_\_\_\_\_

## Multistep Ratio and Percent Word Problems- Step-by-Step Lesson

1. Andrea has a recipe that needs  $\frac{5}{4}$  teaspoon of cream for every 2 cups of milk. If Andrea increases the amount of milk to 8 cups of milk, how many teaspoons of cream are needed?



### Explanation #1:

Step 1) First we need to know what is being asked of us.

“How many teaspoons of cream are needed?”

Step 2 a) We can use these numbers to find the unit rate.

For every 2 cups of milk, teaspoons of cream required =  $\frac{5}{4}$

For every 1 cup of milk, teaspoons of cream required =  $\frac{5}{4} \div \frac{2}{1}$

For every 8 cups of milk, teaspoons of cream required =  $\frac{5}{4} \times \frac{1}{2} \times 8$

So 5 teaspoons of cream are needed. = 5

2. Gas prices are projected to increase by 115% by the end of next year. A gallon of gas currently costs \$2.50. What is the projected cost of a gallon of gas for May 2013?

### Explanation #2:

The original cost of a gallon of gas is \$2.50. An increase of 100% means that the cost will double. Another 15% will need to be added to figure out the final projected cost of a gallon of gas.

$$\$2.50 + 2.50 + (0.15 \times 2.50) = 5 + (0.15 \times 2.50) = \$5.375$$

100%	100%	15%
\$2.50	\$2.50	\$0.375

So the projected cost of a gallon of gas for the end of next year is \$5.375

