



LESSON 2.2b  
Eggzactly

Objective Solving Problems with Ratios of Fractions

Warm-Up



Determine each product or quotient.

1.  $\frac{1}{4} \times \frac{3}{6}$

2.  $\frac{5}{10} \times \frac{12}{5}$

3.  $\frac{2}{6} \div \frac{3}{10}$

4.  $\frac{3}{8} \div 1\frac{1}{4}$



1. Tony needs a rate table for his tutoring jobs so that he can look up the charge quickly.

a. Complete the rate table.

Time (Hours)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	$3\frac{1}{2}$	4
Charge (\$)			37.50				

b. How much would Tony charge for  $3\frac{1}{2}$  hours of tutoring?

c. Tony made \$212.50 last weekend. How long did he tutor?  
Explain how you solved the problem.

2. At Pepe's Pizzas, a new deal gives you  $1\frac{1}{2}$  orders of wings for half the price of a single order. Without the deal, a single order of wings costs \$12. What is the cost of a single order of wings with the deal?

3. Abby uses  $3\frac{3}{4}$  scoops of drink mix to make 10 cups of drinks.

a. How much drink mix would she need to use to make 1 cup of drink?

b. She only has  $11\frac{1}{4}$  scoops of drink mix remaining. How many cups of drink can she make?

**Show You  
KNOW**

True, False, Example

Determine whether each statement is true or false. Provide one or more examples and an explanation to justify your answer.

**1. To compute a unit rate associated with a ratio of fractions, multiply both the numerator and denominator by the reciprocal of the denominator.**

**True False**

**2. Any ratio can be written as a complex ratio.**

**True False**

**3. You never scale down to write a complex rate as a unit rate.**

**True False**

**4. A statement with the word "per" is always a unit rate.**

**True False**

**5. Dividing the numerator by the denominator is one way to convert a rate to a unit rate.**

**True False**



**LESSON 2.2b**  
**Eggzactly**



**Objective** Solving Problems with Ratios of Fractions

**Practice**

1. The table shows the gallons filled in a pool over time.

<b>Number of Hours</b>	$\frac{1}{4}$	$\frac{3}{4}$	$1\frac{1}{2}$	$2\frac{1}{2}$
<b>Gallons Filled</b>		$637\frac{1}{2}$		

- Complete the table.
- Determine a unit rate for this situation.
- Use a unit rate to calculate the gallons filled in 5.5 hours.
- Use a unit rate to determine about how many minutes it will take to fill 100 gallons in the pool.

2. The rectangle shown is composed of smaller equally-sized squares. The shaded section has an area of  $\frac{3}{16}$  square inches. Use a unit rate to determine the area of the larger rectangle.



