Assignment

LESSON 3: Tagging Sharks

Write

Describe a situation in which you would use each.

1. variable
2. means and extremes
3. inverse operations
4. isolate the variable

Remember

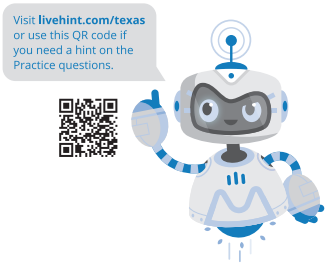
To *solve a proportion* means to determine all the values of the variables that make the proportion true.

You can rewrite a proportion as the product of the means and extremes.

If $\frac{a}{b} = \frac{c}{d}$, then $bc = ad$.

Practice

Write and solve a proportion to answer each question.



1. Carmen is making a strawberry drink. The recipe calls for 5 parts strawberry juice to 3 parts water. Carmen would like to make 64 fluid ounces of the strawberry drink. How many fluid ounces of strawberry juice and water does Carmen need?
2. Elena is making a grape drink. The recipe calls for 2 parts grape juice concentrate to 6 parts water. Elena would like to make 80 fluid ounces of the grape drink. How many fluid ounces of grape juice concentrate and water does Elena need?
3. Jose is making a trail mix. The recipe calls for 3 parts golden raisins to 2 parts cashews. Jose would like to make 30 cups of trail mix. How many cups of golden raisins and cashews does Jose need?
4. Miguel is making a snack mix. The recipe calls for 6 parts of spicy tortilla chips to 3 parts of corn chips. Miguel would like to make 45 cups of snack mix. How many cups of spicy tortilla chips and corn chips does Miguel need?
5. Carla is making a bean salad. The recipe calls for 4 parts green beans to 3 parts yellow wax beans. Carla would like to make 56 ounces of bean salad. How many ounces of green beans and yellow wax beans does Carla need?
6. Shawna is making smoothies. The recipe calls for 2 parts yogurt to 3 parts blueberries. Shawna wants to make 10 cups of smoothie mix. How many cups of yogurt and blueberries does Shawna need?

Stretch

The word *four* has 4 letters, so the number-to-letter-count ratio for 4 is 1 : 1, or just 1. Are there any other numbers between 1 and 20 that have equal number-to-letter-count ratios? What are they?

Review

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

   a. Complete the table.

Number of Hours	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
Gallons Filled			500	

   b. Determine a unit rate for this situation.

2. Pi is the ratio of what two measures of a circle?

3. Which is a better deal—a 16-inch diameter pizza for \$12.99 or an 8-inch diameter pizza for \$6?

4. Evaluate each expression for $g = 10$.

   a. $9 - 4g + 1$

   b. $\frac{20}{g} \div g + (8 - 5)$