

9. **Error Analysis** The table shows a proportional relationship between x and y . Dimitrios and Katerina have to complete the table. Katerina incorrectly says the ratio $\frac{y}{x}$ is $\frac{1}{10}$.

a) Complete the table.

x	y	Ratio $\frac{y}{x}$
3	30	_____
5	50	_____
7	70	_____
9	90	_____

b) What error did Katerina likely make?

- A. She found and simplified $x \cdot y$.
- B. She found and simplified $x \div y$.
- C. She found and simplified $x - y$.
- D. She found and simplified $x + y$.

10. **Cooking** At a café, the cook uses a recipe that calls for eggs and milk. The amount of eggs and milk have a proportional relationship. Complete the table.

Ingredients in Recipe			
Number of Eggs	2	3	_____
Cups of Milk	6	_____	12
Ratio $\frac{\text{Milk}}{\text{Eggs}}$	_____	$\frac{3}{1}$	$\frac{3}{1}$

11. **Open-Ended** The lengths and widths of four rectangles have a proportional relationship.

a) Complete the table.

Dimensions of Rectangle				
Length	2	3	4	_____
Width	14	_____	28	35
Ratio $\frac{\text{Width}}{\text{Length}}$	_____	$\frac{7}{1}$	_____	$\frac{7}{1}$

b) Draw and label two rectangles with lengths and widths that have the same proportional relationship.

12. Decide whether the table shows a proportional relationship between x and y .

x	y
30	150
$\frac{1}{6}$	$\frac{5}{6}$
199	995
$\frac{2}{15}$	$\frac{2}{3}$

13. Each morning at a pet store, Jill puts gerbil food in the cage according to how many gerbils there are. The table shows the amounts of food for different numbers of gerbils. Decide if the relationship between the number of gerbils and the amount of food is proportional.

Pet Food	
Gerbils	Food (grams)
4	62
7	108.5
8	124
11	170.5

14. **Think About the Process** The number of songs on a CD and the length of the CD have a proportional relationship.

- a) Which operation should you use to find the ratios?

- A. Multiplication C. Division
 B. Subtraction D. Addition

For parts (b) through (d), complete the table.

Lengths of CDs			
Number of Songs	10	12	b) _____
Length (Minutes)	55	66	77
Ratio $\frac{\text{Length}}{\text{Songs}}$	c) _____	d) _____	$5\frac{1}{2}$

15. **Think About the Process**

Kendall earns extra money by raking yards in the fall. The table shows the number of yards she rakes each day and the hours she spends raking them.

Raking Yards		
Yards	Hours	Ratio $\frac{\text{Hours}}{\text{Yards}}$
8	5	?
5	4	?
4	5	?
3	4	?

- a) What is the first step in deciding whether the relationship between the number of yards and the hours spent raking is proportional?

- A. Finding the total number of days Kendall rakes leaves
 B. Finding the ratio for each row in the table
 C. Comparing the ratios in the table
 D. Simplifying each ratio in the table

- b) Is the relationship between the number of yards and the hours spent raking proportional?