LESSON MAKER PRO

Ratio Table Quest

Find missing values in proportional relationships.

GRADE 7 · 7.CE.2.a

7.CE.2.a "Given a proportional relationship between two quantities, create and use a ratio table to determine missing values."

NAME _____ DATE _____

BUILD MATCHING RATIOS

A ratio table lists matching values for two quantities. If the relationship is proportional, multiply or divide both matching values by the same factor.

WORKED EXAMPLE

A snack stand sells 5 pretzels for $15. At the same rate, what is the cost of 20 pretzels?

1. Start with 5 pretzels and $15.
2. 20 is 4 times 5.
3. Multiply $15 by 4.
4. The cost is $60.

Answer: $60

PRACTICE 6 problems

1 Create a ratio table. Three keychains cost $12. At the same rate, how much do 7 keychains cost?

ANSWER _____

2 Create a ratio table. A printer makes 8 labels in 4 seconds. At the same rate, how many seconds does it take to print 18 labels?

ANSWER _____

3 Create a ratio table. On a map, 6 centimeters represents 24 kilometers. How many kilometers does 11 centimeters represent?

ANSWER _____

4 Create a ratio table. A market sells 10 pounds of apples for $30. At the same price, how much do 14 pounds cost?

ANSWER _____

5 Create a ratio table. A game player earns 16 coins in 4 quests. At the same rate, how many quests are needed to earn 36 coins?

ANSWER _____

6 Create a ratio table. Eighteen ounces of snack mix fill 3 bags equally. How many ounces are needed to fill 7 bags equally?

ANSWER _____

APPLY IT Show your work

1 The table shows the proportional cost of wristbands for a school event. Complete a ratio table in your work, then find the cost of 10 wristbands.

SCHOOL EVENT WRISTBANDS

Wristbands	Cost ($)
4	28
10	?

ANSWER _____

2 At a school dance, a photo booth prints 9 photo strips in 3 minutes at a constant rate. How many photo strips can it print in 14 minutes? Create a ratio table to solve.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A printer makes 21 flyers in 6 minutes at a constant rate. It runs for 14 minutes. Use a ratio table to find how many flyers it makes. Explain one table step that helps you reach 14 minutes.

WORK SPACE AND ANSWER

ANSWER KEY

Ratio Table Quest

GRADE 7 · 7.CE.2.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Create a ratio table. Three keychains cost $12. At the same rate, how much do 7 keychains cost?	**$28**
2	Create a ratio table. A printer makes 8 labels in 4 seconds. At the same rate, how many seconds does it take to print 18 labels?	**9 seconds**
3	Create a ratio table. On a map, 6 centimeters represents 24 kilometers. How many kilometers does 11 centimeters represent?	**44 kilometers**
4	Create a ratio table. A market sells 10 pounds of apples for $30. At the same price, how much do 14 pounds cost?	**$42**
5	Create a ratio table. A game player earns 16 coins in 4 quests. At the same rate, how many quests are needed to earn 36 coins?	**9 quests**
6	Create a ratio table. Eighteen ounces of snack mix fill 3 bags equally. How many ounces are needed to fill 7 bags equally?	**42 ounces**

PART 2 · APPLY IT

1. **$70** Divide 28 by 4 to find that each wristband costs $7. Multiply 10 by $7.
2. **42 photo strips** Divide 9 by 3 to find 3 photo strips per minute. Multiply 3 by 14.

CHALLENGE

49 flyers; divide 21 flyers and 6 minutes by 3 to get 7 flyers in 2 minutes, then multiply both values by 7 to get 49 flyers in 14 minutes.

Accept correct equivalent ratio tables and answers with or without unit symbols when the value is clear. For the challenge, accept any valid explanation that scales both quantities by the same factor.