LESSON MAKER PRO

Rate Match Mission

Use unit rates to solve proportional situations.

GRADE 7 · 7.RP.A

CCSS.Math.Content.7.RP.A "Analyze proportional relationships and use them to solve real-world and mathematical problems."

NAME _____ DATE _____

FIND THE UNIT RATE

In a proportional relationship, the ratio between two quantities stays the same. Find the amount for 1 unit by dividing, then multiply by the number of units you need.

WORKED EXAMPLE

11 pencils cost $33. How much do 4 pencils cost at the same rate?

1. $33 / 11 = $3 per pencil.
2. 4 pencils x $3 per pencil = $12.

Answer: $12

PRACTICE 6 problems

1 5 game tokens cost $35. What is the cost of 1 game token?

ANSWER _____

2 A bike travels 18 miles in 2 hours at a constant speed. How far does it travel in 6 hours?

ANSWER _____

3 The equation y = 9x shows a proportional relationship. Find y when x = 7.

ANSWER _____

4 A plant grows 16 centimeters in 8 days at a constant rate. How many centimeters does it grow in 9 days?

ANSWER _____

5 15 ounces of trail mix cost $45. How much do 2 ounces cost?

ANSWER _____

6 Solve the proportion x/14 = 5/7.

ANSWER _____

APPLY IT Show your work

1 A gaming club charges $56 for 7 months of membership. If the monthly cost stays the same, what will 9 months of membership cost?

WORK SPACE

ANSWER _____

2 A student is ordering custom stickers for a club. A print shop charges $21 for 14 stickers at a constant rate. How many stickers can the club order for $39?

WORK SPACE

ANSWER _____

CHALLENGE One step up

At a school store, 6 notebooks cost $15. A larger pack has 14 notebooks. If prices are proportional, would 14 notebooks cost more or less than $34? Explain by finding the cost.

WORK SPACE AND ANSWER

ANSWER KEY

Rate Match Mission

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	5 game tokens cost $35. What is the cost of 1 game token?	**$7**
2	A bike travels 18 miles in 2 hours at a constant speed. How far does it travel in 6 hours?	**54 miles**
3	The equation y = 9x shows a proportional relationship. Find y when x = 7.	**63**
4	A plant grows 16 centimeters in 8 days at a constant rate. How many centimeters does it grow in 9 days?	**18 centimeters**
5	15 ounces of trail mix cost $45. How much do 2 ounces cost?	**$6**
6	Solve the proportion x/14 = 5/7.	**x = 10**

PART 2 · APPLY IT

1. **$72** Divide $56 by 7 to find a monthly cost of $8. Multiply $8 by 9.
2. **26 stickers** Scale $21 to $39 by multiplying by 13/7. Multiply 14 stickers by 13/7 to get 26 stickers.

CHALLENGE

More than $34. Each notebook costs $2.50, so 14 notebooks cost $35.

Accept equivalent proportional methods, including unit rates, tables, or cross multiplication. Require units for money, distance, and item-count answers.