LESSON MAKER PRO

Ratio Moves

Scale ratios to find missing amounts.

GRADE 7 · 7.A.2.3

7.A.2.3 "Use proportional reasoning to solve problems involving ratios."

NAME _____ DATE _____

SCALE BOTH QUANTITIES

In a proportional relationship, both quantities change by the same factor. Divide to find that factor, then multiply the matching quantity by it.

WORKED EXAMPLE

Find the missing cost.

ARCADE PASSES

Passes	Cost ($)
7	28
21	?

1. 21 / 7 = 3
2. 28 x 3 = 84

Answer: $84

PRACTICE 4 problems

1 A recipe uses 2 cups of oats for 6 bars. How many cups are needed for 18 bars?

ANSWER _____

2 A game awards 45 points for 5 wins. How many points are awarded for 8 wins?

ANSWER _____

3 On a map, 1 cm represents 9 km. How far does 4 cm represent?

ANSWER _____

4 A pack of 10 markers costs $15. What would 12 markers cost at the same rate?

ANSWER _____

APPLY IT Show your work

1 Downloading 6 songs uses 24 MB of data. At the same rate, how much data would 11 songs use?

WORK SPACE

ANSWER _____

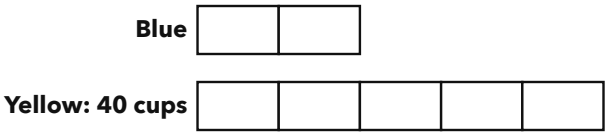
2 A club sells 8 stickers for $12. At the same rate, how much would 20 stickers cost?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The tape shows a paint mix. How many cups of paint are made in all? Explain.



WORK SPACE AND ANSWER

ANSWER KEY

Ratio Moves

GRADE 7 · 7.A.2.3

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A recipe uses 2 cups of oats for 6 bars. How many cups are needed for 18 bars?	**6 cups**
2	A game awards 45 points for 5 wins. How many points are awarded for 8 wins?	**72 points**
3	On a map, 1 cm represents 9 km. How far does 4 cm represent?	**36 km**
4	A pack of 10 markers costs $15. What would 12 markers cost at the same rate?	**$18**

PART 2 · APPLY IT

1. **44 MB** Each song uses 24 / 6 = 4 MB. Multiply 11 x 4 = 44 MB.
2. **$30** Each sticker costs $12 / 8 = $1.50. Multiply 20 x $1.50 = $30.

CHALLENGE

56 cups. Each part is 40 / 5 = 8 cups, so the blue paint is 2 x 8 = 16 cups. In all, 40 + 16 = 56 cups.

Accept equivalent proportional methods. For the challenge, the explanation must account for both blue and yellow paint.