

Rate Table Quest

Find missing values by using the unit rate.

GRADE 6 • 6.PFA.2.b

6.PFA.2.b "Determine a missing value in a ratio table that represents a proportional relationship between two quantities using a unit rate."

NAME _____

DATE _____

USE THE UNIT RATE

A proportional ratio table has the same rate in every column. Divide to find the amount for one unit, then multiply by the number of units you need.

WORKED EXAMPLE

Ratio table: Bracelets | 3 | 8 Cost (\$)
| 12 | x

1. $12 \div 3 = 4$ dollars per bracelet.

2. $8 \times 4 = 32$ dollars.

3. The missing cost is 32 dollars.

Answer: x = 32

PRACTICE 6 problems

1 Ratio table: Granola bars | 5 | 9 Cost (\$)
| 15 | x

ANSWER _____

2 Ratio table: Hours | 4 | 7 Miles traveled
| 28 | x

ANSWER _____

3 Ratio table: Batches | 2 | 5 Ounces of fruit
| 18 | x

ANSWER _____

4 Ratio table: Sticker packs | 7 | 10 Stickers
| 42 | x

ANSWER _____

5 Ratio table: Days | 6 | x Pages read
| 24 | 36

ANSWER _____

6 Ratio table: Ounces of trail mix | 16 | 28 Cost (\$)
| 4 | x

ANSWER _____

APPLY IT Show your work

- 1** A player earns 14 gems for 2 completed quests in a game. At the same rate, how many gems will the player earn for 11 completed quests?

WORK SPACE

ANSWER _____

- 2** A music club puts 45 songs into 5 equal playlists. If the club makes 7 playlists with the same number of songs in each, how many songs will it use?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A game gives 16 coins for 4 cleared levels. At the same rate, how many coins will a player earn for 25 cleared levels? Explain how the unit rate helps you find the answer.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Ratio table: Granola bars 5 9 Cost (\$) 15 x	x = 27
2	Ratio table: Hours 4 7 Miles traveled 28 x	x = 49
3	Ratio table: Batches 2 5 Ounces of fruit 18 x	x = 45
4	Ratio table: Sticker packs 7 10 Stickers 42 x	x = 60
5	Ratio table: Days 6 x Pages read 24 36	x = 9
6	Ratio table: Ounces of trail mix 16 28 Cost (\$) 4 x	x = 7

PART 2 • APPLY IT

- 77 gems** $14 / 2 = 7$ gems per quest. Then $11 \times 7 = 77$ gems.
- 63 songs** $45 / 5 = 9$ songs per playlist. Then $7 \times 9 = 63$ songs.

CHALLENGE

100 coins. $16 / 4 = 4$ coins per level, and $25 \times 4 = 100$.

Accept equivalent statements of each missing value, with or without units when the value is clear. For the challenge, accept any explanation that correctly finds and uses the unit rate of 4 coins per level.