

Rate Ready

Find unit prices and constant speeds.

GRADE 6 • 6.RP.A.3b

CCSS.Math.Content.6.RP.A.3b "Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?"

NAME _____

DATE _____

THE BIG IDEA

A unit rate compares an amount to 1 unit. Divide to find the amount for 1, then multiply the unit rate by the number of units you need.

WORKED EXAMPLE

Five movie tickets cost \$35. At the same price, what do 8 tickets cost?

1. Find the price for 1 ticket: $\$35 / 5 = \7 .
2. Multiply by 8 tickets: $\$7 \times 8 = \56 .

Answer: \$56 for 8 tickets.

PRACTICE 6 problems

- 1** A runner travels 48 miles in 3 hours. What is the unit rate in miles per hour?

ANSWER _____

- 2** \$54 buys 6 notebooks. What is the price of 1 notebook?

ANSWER _____

- 3** A printer makes 72 pages in 4 minutes. What is the unit rate in pages per minute?

ANSWER _____

- 4** 12 granola bars cost \$24. At the same price, how much do 9 granola bars cost?

ANSWER _____

- 5** A container holds 66 ounces of juice in 6 equal bottles. How many ounces are in 1 bottle?

ANSWER _____

- 6** A player earns 84 points in 12 rounds. At the same rate, how many points will the player earn in 4 rounds?

ANSWER _____

APPLY IT Show your work

- 1** Four custom phone charms cost \$52. If each charm has the same price, how much do 9 charms cost?

WORK SPACE

ANSWER _____

- 2** A game tester earns 90 tokens in 10 levels at a steady rate. How many tokens will the tester earn in 14 levels?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Deal A has 9 game cards for \$27. Deal B has 12 game cards for \$24. Which deal has the lower price per card? If that deal's rate continued, how much would 20 cards cost? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A runner travels 48 miles in 3 hours. What is the unit rate in miles per hour?	16 miles per hour
2	\$54 buys 6 notebooks. What is the price of 1 notebook?	\$9 per notebook
3	A printer makes 72 pages in 4 minutes. What is the unit rate in pages per minute?	18 pages per minute
4	12 granola bars cost \$24. At the same price, how much do 9 granola bars cost?	\$18
5	A container holds 66 ounces of juice in 6 equal bottles. How many ounces are in 1 bottle?	11 ounces per bottle
6	A player earns 84 points in 12 rounds. At the same rate, how many points will the player earn in 4 rounds?	28 points

PART 2 • APPLY IT

1. **\$117** Divide \$52 by 4 to find that each charm costs \$13. Multiply \$13 by 9.
2. **126 tokens** Divide 90 by 10 to find 9 tokens per level. Multiply 9 by 14.

CHALLENGE

Deal B. Deal A costs \$3 per card, and Deal B costs \$2 per card, so 20 cards at Deal B's rate cost \$40.

Accept equivalent unit-rate labels, such as miles/hour or miles per hour. For money answers, accept a dollar sign or the word dollars when the value is correct.