

Rate Ready

Use unit rates to solve real-life questions.

GRADE 7 • TEKS 7.1.A

7.1.A "apply mathematics to problems arising in everyday life, society, and the workplace;"

NAME _____

DATE _____

FIND THE UNIT RATE

When a situation has a constant rate, first find the amount for 1 unit. Divide to find the unit rate, then multiply by the number of units you need. Keep track of labels such as dollars, miles, or pages.

WORKED EXAMPLE

A snack stand sells 3 bags of trail mix for \$12. At the same price per bag, what do 5 bags cost?

1. Find the cost for 1 bag: $\$12 \div 3 = \4 .
2. Find the cost for 5 bags: $5 \times \$4 = \20 .

Answer: The cost is \$20.

PRACTICE 6 problems

- 1** A pack of 11 stickers costs \$22. What is the cost per sticker?

ANSWER _____

- 2** A runner completes 56 laps in 7 practices. If the runner completes the same number each practice, how many laps is that per practice?

ANSWER _____

- 3** Store A sells 16 ounces of granola for \$24. Store B sells 18 ounces of granola for \$27. Which store has the lower price per ounce?

ANSWER _____

- 4** A game shop sells 9 tokens for \$63. At the same rate, what is the cost of 2 tokens?

ANSWER _____

- 5** A printer makes 84 pages in 6 minutes. At the same rate, how many pages will it make in 10 minutes?

ANSWER _____

- 6** A bus travels 72 miles in 8 hours. At the same rate, how far will it travel in 11 hours?

ANSWER _____

APPLY IT Show your work

- 1** Jordan earns \$18 for 2 hours of work helping at the library. If Jordan earns the same hourly rate, how much will Jordan earn for 7 hours of work?

WORK SPACE

ANSWER _____

- 2** The school garden club has \$96 to buy identical water bottles that cost \$8 each. The club needs 9 bottles. Does the club have enough money, and how much money will remain?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A coding club is comparing two class plans. Plan A costs \$13 per month. Plan B has a \$10 joining fee plus \$8 per month. After how many months will the plans cost the same amount? What will that amount be?

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A pack of 11 stickers costs \$22. What is the cost per sticker?	\$2 per sticker
2	A runner completes 56 laps in 7 practices. If the runner completes the same number each practice, how many laps is that per practice?	8 laps per practice
3	Store A sells 16 ounces of granola for \$24. Store B sells 18 ounces of granola for \$27. Which store has the lower price per ounce?	Neither store. Both cost \$1.50 per ounce.
4	A game shop sells 9 tokens for \$63. At the same rate, what is the cost of 2 tokens?	\$14
5	A printer makes 84 pages in 6 minutes. At the same rate, how many pages will it make in 10 minutes?	140 pages
6	A bus travels 72 miles in 8 hours. At the same rate, how far will it travel in 11 hours?	99 miles

PART 2 • APPLY IT

1. **\$63** Divide \$18 by 2 to find an hourly rate of \$9, then multiply \$9 by 7.
2. **Yes. The club will have \$24 remaining.** Multiply 9 by \$8 to get a cost of \$72, then subtract \$72 from \$96.

CHALLENGE

After 2 months, both plans cost \$26.

Accept equivalent unit-rate forms, such as \$1.50 per ounce or $\$3/2$ per ounce. For the comparison problem, accept any clear statement that the two stores have equal unit prices.