

Rate Ready

Find rates and unit rates in everyday situations.

GRADE 6 • MA.6.AR.3.2

MA.6.AR.3.2 "Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate."

NAME _____

DATE _____

FIND THE UNIT RATE

A rate compares two quantities with different units, such as stickers and packs. A unit rate tells the amount for 1 unit, so divide both parts of the rate by the same number until one quantity is 1.

WORKED EXAMPLE

A store puts 21 stickers into 7 packs.
What is the rate, and what is the unit rate in stickers per pack?

1. Write the rate: 21 stickers/7 packs.
2. Divide both quantities by 7.
3. $21/7 = 3$ and $7/7 = 1$.

Answer: 21 stickers per 7 packs; 3 stickers per pack

PRACTICE 6 problems

- 1** A cyclist rides 32 kilometers in 4 hours. Write the rate and the unit rate in kilometers per hour.

ANSWER _____

- 2** Four notebooks cost \$16. Write the rate and the unit rate in dollars per notebook.

ANSWER _____

- 3** A player scores 45 points in 9 games. Write the rate and the unit rate in points per game.

ANSWER _____

- 4** A faucet fills 10 liters in 2 minutes. Write the rate and the unit rate in liters per minute.

ANSWER _____

- 5** A recipe uses 15 ounces of juice for 8 servings. Write the rate and the unit rate in ounces per serving.

ANSWER _____

- 6** A small boat travels 27 miles using 12 gallons of fuel. Write the rate and the unit rate in miles per gallon.

ANSWER _____

APPLY IT Show your work

- 1** At a gaming tournament, a player earns 48 points in 6 matches. What is the unit rate in points per match?

WORK SPACE

ANSWER _____

- 2** Jalen saves \$54 over 6 weeks to buy new headphones. What is Jalen's unit rate in dollars per week?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

At a school market, Team A makes 44 bracelets in 4 hours. Team B makes 45 bracelets in 5 hours. Which team makes bracelets faster? How many more bracelets per hour does that team make?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A cyclist rides 32 kilometers in 4 hours. Write the rate and the unit rate in kilometers per hour.	32 kilometers per 4 hours; 8 kilometers per hour
2	Four notebooks cost \$16. Write the rate and the unit rate in dollars per notebook.	\$16 per 4 notebooks; \$4 per notebook
3	A player scores 45 points in 9 games. Write the rate and the unit rate in points per game.	45 points per 9 games; 5 points per game
4	A faucet fills 10 liters in 2 minutes. Write the rate and the unit rate in liters per minute.	10 liters per 2 minutes; 5 liters per minute
5	A recipe uses 15 ounces of juice for 8 servings. Write the rate and the unit rate in ounces per serving.	15 ounces per 8 servings; 15/8 ounce per serving
6	A small boat travels 27 miles using 12 gallons of fuel. Write the rate and the unit rate in miles per gallon.	27 miles per 12 gallons; 9/4 miles per gallon

PART 2 • APPLY IT

1. **8 points per match** Divide 48 points by 6 matches. The player earns 8 points for each match.
2. **\$9 per week** Divide \$54 by 6 weeks. Jalen saves \$9 each week.

CHALLENGE

Team A makes bracelets faster. Team A makes 11 bracelets per hour, and Team B makes 9 bracelets per hour, so Team A makes 2 more bracelets per hour.

Accept equivalent fractional forms for unit rates, as long as the units are correct. Students should state the unit rate with a per 1 unit interpretation.