Rate Ready

Find the amount for one unit.

7.4.B · calculate unit rates from rates in mathematical and real-world problems;

Name _____ Date _____

UNIT RATE RULE

A unit rate tells how much of one quantity goes with 1 of another quantity. To find a unit rate, divide and then write the correct units.

Worked example

A bus travels 84 miles in 3 hours. Find the unit rate in miles per hour.

1. Write the rate: 84 miles / 3 hours.
2. Divide: 84 / 3 = 28.
3. Attach the units: 28 miles per hour.

28 miles per hour

1. Practice

A printer makes 45 flyers in 5 minutes. Find the unit rate in flyers per minute.

2. Practice

Eight notebooks cost $16. Find the unit rate in dollars per notebook.

3. Practice

A club collects 56 cans in 7 days. Find the unit rate in cans per day.

4. Practice

5/8 pound of trail mix is packed equally into 5 bags. Find the unit rate in pounds per bag.

5. Practice

A bus travels 90 miles using 6 gallons of fuel. Find the unit rate in miles per gallon.

6. Practice

A water tank fills 72 bottles with 12 liters of water. Find the unit rate in bottles per liter.

7. Apply

At an esports club, 42 players sign up over 6 weeks. If players sign up at the same rate, how many players sign up each week?

8. Apply

A skateboard shop charges $54 for 9 wheels. What is the cost per wheel?

9. Challenge

Plan A gives 16 game tokens for $4. Plan B gives 25 game tokens for $5. Which plan gives more game tokens per dollar? Show both unit rates.

What to accept

Accept equivalent unit-rate wording when the value and units are correct. Require students to label the unit rate with the requested units.

1. Practice

9 flyers per minute

2. Practice

$2 per notebook

3. Practice

8 cans per day

4. Practice

1/8 pound per bag

5. Practice

15 miles per gallon

6. Practice

6 bottles per liter

7. Apply

7 players per week

Divide 42 players by 6 weeks. The unit rate is 7 players per week.

8. Apply

$6 per wheel

Divide $54 by 9 wheels. Each wheel costs $6.

9. Challenge

Plan A: 4 game tokens per dollar. Plan B: 5 game tokens per dollar. Plan B gives more game tokens per dollar.