Solve Problems with Unit Rates — Homework

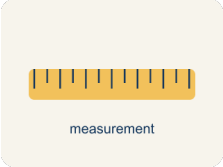
Lesson 3-8 • Standard 6.AT.2

Name: _____ **Period:** _____ **Date:** _____

Today's Goals

Content: I can solve real-world problems by using unit rates to compare options.
Language: I can explain my comparison using the words unit rate, better buy, per unit, and rate.

Key Words



Unit Rate Problem Solving (Resolución de problemas con tasas unitarias) — Find an amount per 1 unit and use it to compare choices or solve a problem.



Unit Rate (Tasa unitaria) — A rate for just 1 of something, like cost for 1 item.



Better Buy (Mejor compra) — The choice that costs less for each item.



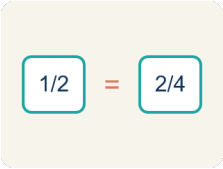
Comparison (Comparación) — Looking at two or more amounts to see how they are related.



Per Unit (Por unidad) — For each single item.



Rate (Tasa) — A ratio comparing two amounts with different units, like miles per hour.



Proportion (Proporción) — A math sentence saying two ratios are equal. It helps find a missing number.

Practice

Show your work. Use the blank space under each problem.

1. Which is the better buy: 6 bouncy balls for $4.50 or 10 bouncy balls for $8.00?

A. 10 for $8.00 — $0.80 each
B. They cost the same per ball
C. Not enough information
D. 6 for $4.50 — $0.75 each

2. A faucet drips 15 ounces of water in 5 minutes. What is the unit rate?

A. 0.33 ounces per minute
B. 3 ounces per minute
C. 5 ounces per minute
D. 15 ounces per minute

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3. Find the unit rate for each deal and identify the better buy.

Option	Deal	Unit Rate
Store A Batteries	8 for $6.00	
Store B Batteries	12 for $8.40	
Store A Candy	15 for $6.75	
Store B Candy	20 for $8.00	

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4. A machine dispenses 24 tokens in 3 minutes. At this rate, how many tokens does it dispense in 10 minutes?

A. 60 tokens
B. 72 tokens
C. 80 tokens
D. 240 tokens

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5. Three friends each walked different distances in different times. Sort them from fastest to slowest.

Groups: Fastest | Middle | Slowest

- Aiden: 6 miles in 2 hours → _____
- Bella: 10 miles in 4 hours → _____
- Carlos: 4 miles in 2 hours → _____

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6. A factory produces 360 widgets in 8 hours. At the same rate, how many widgets are produced in a 12-hour shift?

A. 360 widgets
B. 480 widgets
C. 540 widgets
D. 720 widgets

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7. Spot the Common Mistake

Step 1 (Read): A vending machine dispenses 24 tokens in 3 minutes. How many tokens per minute is that?

Step 2 (Attempt): A student writes: 3 ÷ 24 = 0.125, so the machine dispenses 0.125 tokens per minute.

Step 3 (Check): The student divided minutes by tokens, which gives minutes per token, not tokens per minute.

Which step has the mistake? Explain and fix it:

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8. The snack bar compares two popcorn deals: 12 oz for $3.00 or 20 oz for $4.00. Which is the better buy?

A. 12 oz for $3.00 — $0.25 per oz
B. They cost the same per ounce
C. Not enough information

D. 20 oz for $4.00 — $0.20 per oz

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9. The delivery van brings arcade supplies 150 miles in 3 hours. What is the unit rate in miles per hour?

A. 30 miles per hour
B. 45 miles per hour
C. 50 miles per hour
D. 153 miles per hour

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10. The ticket counter sells redemption tickets two ways: 8 tickets for $2.00 or 15 tickets for $3.00. Which costs less per ticket?

A. 8 tickets for $2.00 — $0.25 each
B. They cost the same per ticket
C. Cannot determine
D. 15 tickets for $3.00 — $0.20 each
