



Ratio & rate reasoning

GRADE 6 MATH

Name _____

Date _____

Work through the sheet in order — it ramps from quick calculations to comparing rates. Show your thinking; final answers go in the boxes. One skill: **ratio and rate reasoning**.

WORKED EXAMPLE

A walker covers 12 miles in 4 hours. To find the time for 21 miles, reason with the rate: speed = $12 \div 4 = 3$ mph; time = $21 \div 3 = 7$ hours. Choose a ratio table, the unit rate, or scaling.

1. 3 pens cost \$6. What is the cost of **7 pens**?

FLUENCY

Show your thinking

Answer

2. A printer prints **5 pages in 2 minutes**. How many pages in **10 minutes**?

FLUENCY

Show your thinking

Answer

3. A table shows **4 apples cost \$2**. What is the cost of **10 apples**?

FLUENCY

Show your thinking

Answer

4. A recipe for **6 muffins** uses **2 cups of flour**. How much flour for **15 muffins**?

APPLICATION

Show your thinking

Answer

5. A cyclist rides **24 miles in 2 hours**. At the same rate, how long to ride **60 miles**?

APPLICATION

Show your thinking

Answer

6. **2 cups of blue paint** cover **3 walls**. How many cups are needed for **12 walls**?

APPLICATION

Show your thinking

Answer

7. Store A sells 5 lb of apples for \$10. Store B sells 8 lb for \$12. Which is the **better deal** per pound? Justify.

REASONING

Show your thinking

Answer

8. A double number line shows **4 hours = 20 miles** walked. Use it to find the miles walked in **7 hours**, and explain.

REASONING

Show your thinking

Answer

9. Recipe A is 3 cups water : 2 cups juice. Recipe B is 5 cups water : 3 cups juice. Which is **more juicy** (more juice per cup of water)? Justify.

REASONING

Show your thinking

Answer