

Revision Layer: Cumulative Connection

Name: _____ **Grade:** _____ **Date:** _____

Use these short retrieval items near the end of the chapter or at the start of the next lesson. Mix current learning with earlier ideas. Show a representation when it helps, keep units visible, and explain one answer to a partner.

1. Explain why 3:5 and 6:10 describe the same relationship, and name the scale factor.

2. Find the unit rate for 180 miles in 3 hours and attach the correct units.

3. A package costs \$4.50 for 3 pounds. Find the unit rate and explain what the quotient means.

4. Four notebooks cost \$12. Use a ratio table or unit rate to find the cost of 7 notebooks.

Revision Layer: Strategy Studio

These tasks deliberately vary the numbers, representation, unknown, or context. Do not choose a method from the chapter title alone.

1. Represent the same rate, 12 pages in 3 minutes, with a table, a double number line, and a unit rate. Explain what stays invariant.

2. A machine makes 45 parts in 3 hours. Find the hourly rate, then predict the number of parts in 5 hours using two methods.

3. Create two different real-world contexts with the same numerical unit rate of 2.5. Explain how the units change the meaning.

4. A student finds $3 \text{ hours} \div 180 \text{ miles}$ and reports 0.0167 as the speed. Use the requested units to diagnose and repair the division direction.

Transfer Bridge: Familiar, Altered, Non-Routine, and Repair

Use this section after the worked examples and before the exit ticket. The method is deliberately not named in every task. First identify the relationship or action, then represent, solve, and check.

A. Familiar structure

Find the unit rate for 180 miles in 3 hours.

B. Altered structure

Compare 3 kilometres in 20 minutes with 5 kilometres in 30 minutes using a common unit.

C. Non-routine structure

A taxi charges \$5 to start and \$4 per mile. Explain why \$4 per mile is a rate but the total-cost relationship is not directly proportional.

D. Repair and compare

A student chooses \$12 for 3 items over \$15 for 4 items because the total is lower. Use unit rates to repair the decision.
