

Revision Layer: Cumulative Connection

Name: _____ **Class:** _____ **Date:** _____

Use these short retrieval items before beginning the new work. Show a representation when it helps, keep units visible, and explain one answer to a partner.

1. Classify a situation as part-whole, ratio, rate, percent, scale, or another relationship before solving.

2. Choose a representation for a missing-value problem and explain why it fits.

3. Estimate the answer to a multi-step proportional problem.

4. Write a final sentence that interprets the answer with units.

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. Method not named: A 25% discount is followed by 8% tax on a \$160 item. Solve, represent, and check.

2. Insufficient information: A map is 6 cm wide, but no scale is given. What can and cannot be determined?

3. Create two different proportional problems with the same numerical answer but different meanings and units.

4. Choose one earlier problem and solve it in two different ways. Compare which method communicates the relationship most clearly.

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

Classify the relationship before solving: a \$160 item is discounted 25% and taxed 8%.

B. Altered structure

A map is 6 cm wide, but no scale is given. State what can and cannot be determined.

C. Non-routine structure

Create two different proportional problems with the same numerical answer but different meanings and units.

D. Repair and compare

A student solves every proportional problem by cross multiplication. Explain why classification and representation must come first.
