

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. A table has x-values 0, 1, 2, 4 and y-values 0, 3, 6, 12. State the multiplier.

2. Decide whether 2, 4, 6, 8 is additive, multiplicative, both, or neither when the inputs are 1, 2, 3, 4.

3. Plot or describe the point that must be included in every proportional graph.

4. Explain why a constant difference alone does not prove proportionality.

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. Compare two tables: A has (0,0), (1,3), (2,6), (4,12); B has (0,0), (1,3), (2,6), (4,11). Which is proportional, and what single value changes the decision?

2. A student says, "If the numbers go up by the same amount, the relationship is proportional." Write a response that gives one example and one counterexample.

3. Always, sometimes, or never: a proportional relationship has a constant difference. Justify your choice with a table or graph.

4. Create two relationships that agree for $x = 0$, 1 , and 2 but disagree at $x = 4$. Make one proportional and one non-proportional.

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

A table follows $y = 4x$. Find y when $x = 0, 1, 2$, and 5 . State the constant multiplier.

B. Altered structure

A relationship has x -values $0, 2, 4, 6$ and y -values $1, 7, 13, 19$. Is it proportional? Explain why a constant difference is not enough.

C. Non-routine structure

Two shops sell notebooks. Shop A charges \$6 per notebook. Shop B charges \$4 to begin and \$6 per notebook. Which relationship is proportional? Write an equation for each and explain the difference.

D. Repair and compare

A student says, "The output increases by 6 each time, so the relationship is proportional." Repair the statement with a counterexample and a test.
