

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. Find k in $y = kx$ when $(x,y) = (4,12)$.

2. Identify whether a graph through $(0,0)$ is enough evidence by itself.

3. Complete a table for $y = 2.5x$.

4. Explain what the slope means in context.

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. A table has $x = 0, 2, 4, 6$ and $y = 0, 5, 10, 15$. Write the equation and describe the units of k .

2. Two lines both rise steadily, but one crosses the y -axis at 4. Explain why only one is proportional.

3. Given $y = 3x$, predict the missing point $(7, \underline{\quad})$ and describe how the graph changes if k becomes .

4. Write a real context for $y = 2.5x$ and a different context for $y = 2.5x + 4$. Explain the structural difference.

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

For , complete the table for $x = 0, 2, 4$, and 6 .

B. Altered structure

Compare $y = 2.5x$ with . Which is directly proportional and why?

C. Non-routine structure

Two relationships share the rate 2.5 . Create a context for and a different context for , then explain the fixed starting amount.

D. Repair and compare

A student says any straight line is proportional. Use the zero case and intercept to repair the claim.
