

Cumulative Recalculation Review - Part 4

Proportions, Graphs, Scale, and Mixed Applications

Name: _____ Grade: _____ Date: _____

ROAD TEST. Do not reteach everything from a single miss. Look for a cluster: representation, relationship, operation, units/base, or checking. Then route back precisely.

1. Solve $\frac{3}{5} = \frac{x}{25}$ using a scale factor and one other method. Check both results.

2. A relationship follows $y = 2.5x$. Complete a table for $x = 0, 2, 6$, and 10 , and explain what 2.5 means.

3. A straight line crosses the y -axis at 4 . Explain why it is not a direct proportional relationship even if it has a constant slope.

4. A map uses $1 \text{ cm} = 12 \text{ km}$. Find the real distance for 7.5 cm , then reverse the direction for a real distance of 54 km .

5. Two rectangles measure 4 by 7 and 10 by 17.5 . Decide whether they are similar and justify using corresponding scale factors.

6. Classify before solving: A \$160 item is discounted 25% and then taxed 8%. Name the relationship at each step, then find the final price.

7. Insufficient information: A map route is 6 cm long but no scale is given. State exactly what can and cannot be concluded.

8. Reflection: Choose one item and explain how a second representation helped you check the answer.

Recalculation decision: Which earlier chapter or representation would you revisit first if two or more answers reveal the same gap? Write the chapter/idea and one reason.
