

Lesson 3-6 • Apply Day

Reinforce Understanding

Metric Unit Conversions

I can use ratio reasoning to convert between units within the same measurement system.

Worked model

A race route is 7 kilometers long. How many meters is that? (1 km = 1,000 m)

1. Write the conversion factor. 1 km = 1,000 m
2. Decide the direction. km $\rightarrow$ m is LARGER to SMALLER, so multiply.
3. Multiply by 1,000 — shift the decimal 3 places right. 7 $\rightarrow$ 7,000
4. Check: meters are small, so the number got bigger. ✓

Answer: 7 kilometers = 7,000 meters.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. A drawing uses a scale of 1:2. A side is 2 cm in the drawing. Find the actual length.

Complete each step, then write the final answer.

1. Scale factor: ____.
2. Multiply 2×2 : ____.

Answer: _____

2. A drawing uses a scale of 1:3. A side is 3 cm in the drawing. Find the actual length.

Complete each step, then write the final answer.

1. Scale factor: ____.
2. Multiply 3×3 : ____.

Answer: _____

3. A drawing uses a scale of 1:4. A side is 4 cm in the drawing. Find the actual length.

Complete each step, then write the final answer.

1. Scale factor: ____.
2. Multiply 4×4 : ____.

Answer: _____