

# ANSWERS

## SCALE DRAWINGS

**Instructions:** These are situations with different scales. Each situation is on a different scale. What is the length of the real object?

- a) A scale model of a ship with a scale of 1:500 (1 cm on the model represents 500 cm in reality). If the length of the model is 12 cm, what is the actual length of the ship?

**Answer:** The actual length is  $12 \text{ cm} \times 500 = 6,000 \text{ cm}$ , which is 60 meters.

- b) An architectural model of a bridge with a scale of 1:1000 (1 cm on the model represents 1,000 cm in reality). If the model's span is 25 cm, what is the actual span of the bridge?

**Answer:** The actual span is  $25 \text{ cm} \times 1,000 = 25,000 \text{ cm}$ , which is 250 meters.

- c) A model train with a scale of 1:160 (1 cm on the model represents 160 cm in reality). If the length of the model train is 14 cm, what is the actual length of the train?

**Answer:** The actual length is  $14 \text{ cm} \times 160 = 2,240 \text{ cm}$ , which is 22.4 meters.

How Did You Do? 