

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 plan for a garden with a scale of 1:100 (1 cm on the plan represents 100 cm in reality). If the length of a flower bed on the plan is 7 cm, what is the actual length of the flower bed?

Answer: The actual length is $7 \text{ cm} \times 100 = 700 \text{ cm}$, which is 7 meters.

- b) A scale model of a space shuttle with a scale of 1:50 (1 cm on the model represents 50 cm in reality). If the length of the model is 25 cm, what is the actual length of the space shuttle?

Answer: The actual length is $25 \text{ cm} \times 50 = 1,250 \text{ cm}$, which is 12.5 meters.

- c) A floor plan of an office with a scale of 1:75 (1 cm on the plan represents 75 cm in reality). If the width of a conference room on the plan is 12 cm, what is the actual width of the conference room?

Answer: The actual width is $12 \text{ cm} \times 75 = 900 \text{ cm}$, which is 9 meters.

How Did You Do? 