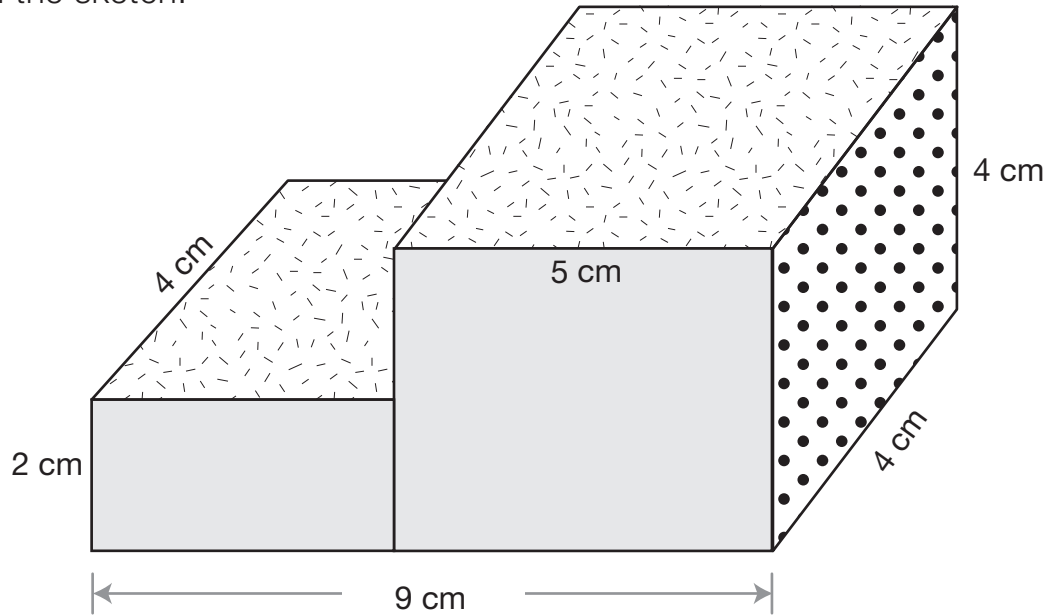


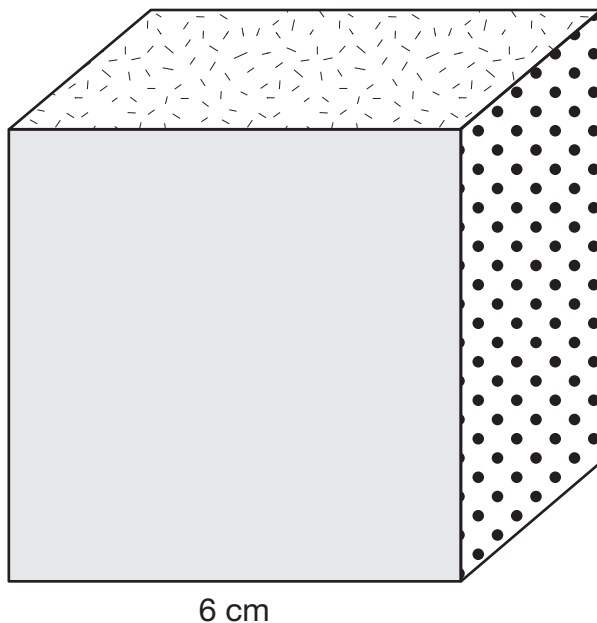
# Volume Problems

1. Two boxes are put together in the following sketch. Find the volume of the boxes in the sketch.



Volume \_\_\_\_\_

2. Find the volume of the cube in the sketch.



Volume \_\_\_\_\_

3. What is the volume of a 10 cm cube?

Volume \_\_\_\_\_

4. A cube has an edge length of 10.5 cm. Choose your best prediction for the volume of this cube.

\_\_\_\_\_ The volume of this cube is a little smaller than 1,000 cm<sup>3</sup>.

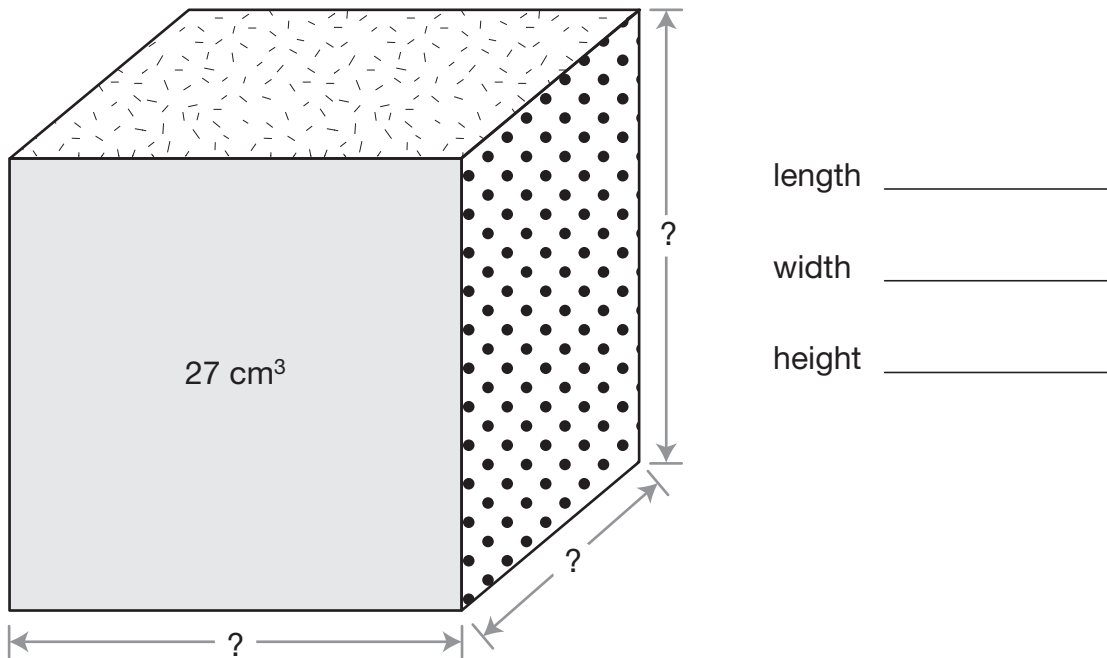
\_\_\_\_\_ The volume of this cube is much smaller than 1,000 cm<sup>3</sup>.

\_\_\_\_\_ The volume of this cube is 1,000 cm<sup>3</sup>.

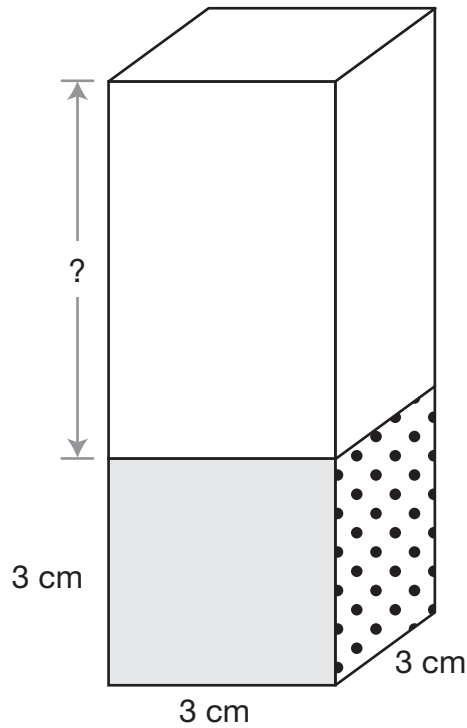
\_\_\_\_\_ The volume of this cube is a little larger than 1,000 cm<sup>3</sup>.

\_\_\_\_\_ The volume of this cube is much larger than 1,000 cm<sup>3</sup>.

5. The volume of this cube is 27 cm<sup>3</sup>. Find the length, width, and height of the cube. Include units.



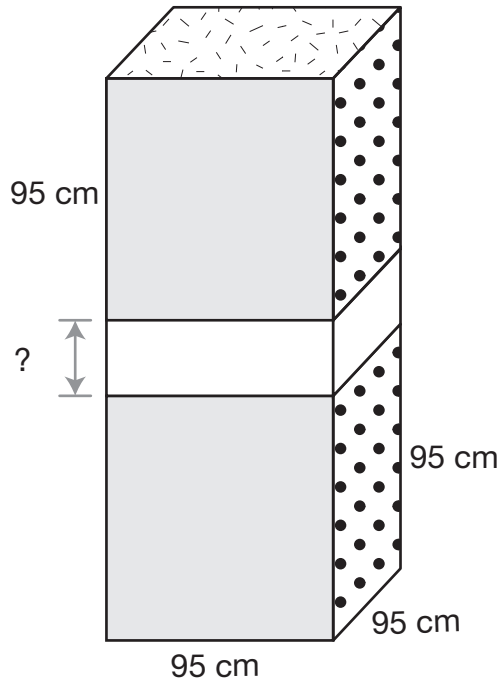
6. The following shape is built from a white box and a shaded cube. The volume of the shape is  $72 \text{ cm}^3$ .



Use the following steps to find the height of the white box. Include units.

- A.** Find the volume of the cube. \_\_\_\_\_
- B.** Find the volume of the white box. \_\_\_\_\_
- C.** What is the length of the white box? \_\_\_\_\_
- D.** What is the width of the white box? \_\_\_\_\_
- E.** Find the height of the white box. \_\_\_\_\_

7. The shape in the sketch is built from two identical cubes and a small white box. The volume of the shape is  $1,985,500 \text{ cm}^3$ . Find the height of the small white box. Show your work.



Height of the white box \_\_\_\_\_