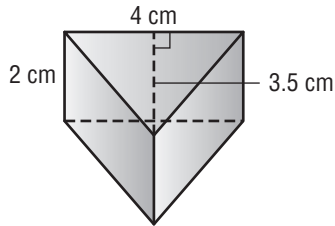


# Lesson 2 Problem-Solving Practice

## Volume of Triangular Prisms

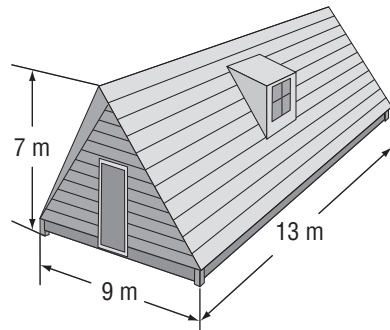
- 1. TOY BLOCKS** A set of wooden blocks includes a triangular prism like the one shown below. Find the volume of the block. **14 cm<sup>3</sup>**



- 2. RAMP** The base of a bicycle ramp has an area of 4 square feet. The ramp is a triangular prism. If the ramp has a height of  $2\frac{1}{2}$  feet, what is the volume of the ramp? **10 ft<sup>3</sup>**

- 3. CLAY** A potter crafts a triangular prism out of clay. The height of the clay prism is 9 centimeters. Each triangle has a base of 12 centimeters and a height of 4 centimeters. What is the volume of the clay piece? **216 cm<sup>3</sup>**

- 4. CABIN** An A-frame cabin is built in the shape of a triangular prism, as shown. The front wall of the cabin has a length of 9 meters and a height of 7 meters. The cabin is 13 meters deep. Find the volume of the cabin. **409.5 m<sup>3</sup>**



- 5. PAPERWEIGHT** A novelty paperweight has a triangular base with an area of 15 square centimeters. If the height of the paperweight is 1.5 centimeters, what is the volume of the paperweight? **22.5 cm<sup>3</sup>**

- 6. SANDBOX** Mr. Riojas is building his children a sandbox that is shaped like a triangular prism. He uses 7-foot-long wooden beams for each side of the base. He measures the height of the triangular base to be 6.1 feet. If he makes the sandbox 1 foot tall, how much sand will he need to fill it? Round to the nearest cubic foot. **21.4 ft<sup>3</sup>**