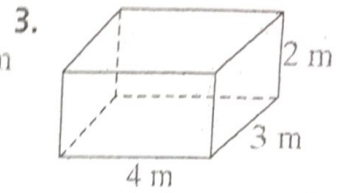
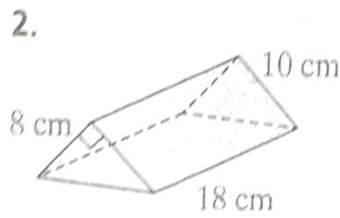
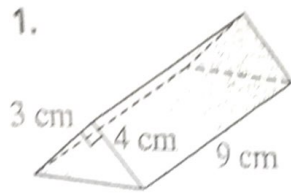


Practice and Problem Solving

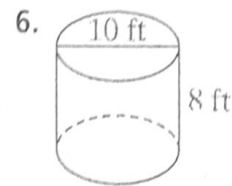
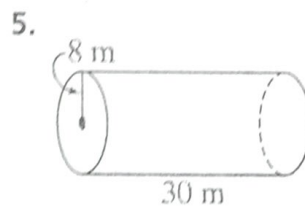
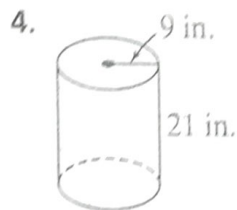
**A** Practice by Example Find the volume of each prism.

Example 1  
(page 558)



Example 2  
(page 558)

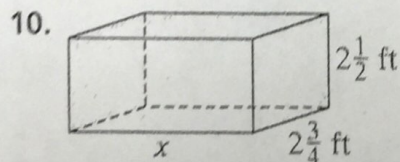
For Exercises 4–7, find the volume of each cylinder to the nearest cubic unit.



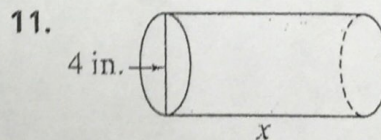
7. a. a mailing tube 25 in. long with a diameter of 4 in.  
 b. a mailing tube with double the dimensions in part (a)  
 c. How do the volumes of the two mailing tubes compare?

- B** Apply Your Skills
8. **Firewood** Wood for a fireplace is often sold by the cord. A cord is 8 ft by 4 ft by 4 ft. How many cubic feet are in a cord of wood?
9. **Storage** An under-the-bed storage box measures 24 in. by 12 in. by 3 in. Find its volume to the nearest cubic centimeter (1 in. = 2.54 cm).

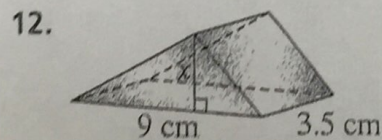
Find each missing dimension. Use  $\pi \approx 3.14$ .



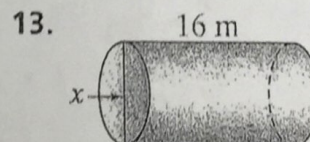
$V = 38.5 \text{ ft}^3$   
 Length =



$V = 125.6 \text{ in.}^3$   
 Height  $\approx$



$V = 50.4 \text{ cm}^3$   
 Height of triangle =



$V = 1,256 \text{ m}^3$   
 Diameter  $\approx$

**Writing in Math** Describe one real object with the given shape. Explain why you might want to find the volume of the object.

14. triangular prism    15. cylinder    16. rectangular prism