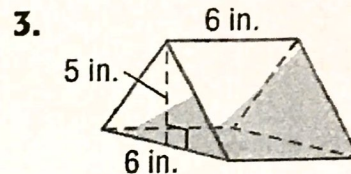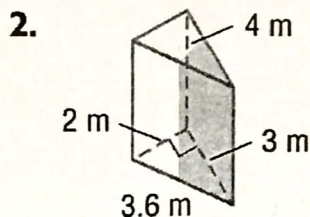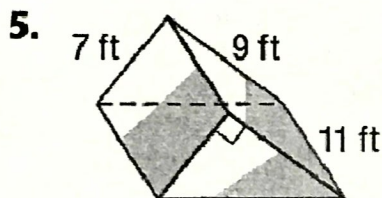Instructions: Find the volume of each prism. Round your answers to the nearest tenth when necessary. Don't forget to label your answers with the appropriate measurements.

1.   3 ft   5 ft   6 ft

$V = 45 \text{ ft}^3$

2.   4 m   2 m   3 m   3.6 m

3.   6 in.   5 in.   6 in.

$V = 90 \text{ in}^3$

4.   16 m   6 m   7 m

5.   7 ft   9 ft   11 ft

$V = 346.5 \text{ ft}^3$

6.   6 m   5.2 m   9 m   6 m   6 m

7.   17 yd   5 yd   14 yd

$V = 595 \text{ yd}^3$

8.   7.6 cm   4.8 cm   5.7 cm   10.4 cm

9.   8 in. $9\frac{1}{2}$ in.   10 in.
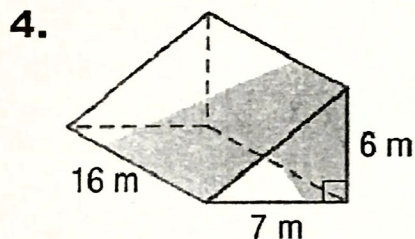
$V = 380 \text{ in}^3$

Instructions: Find the volume of each prism. Round your answers to the nearest tenth when necessary. Don't forget to label your answers with the appropriate measurements.
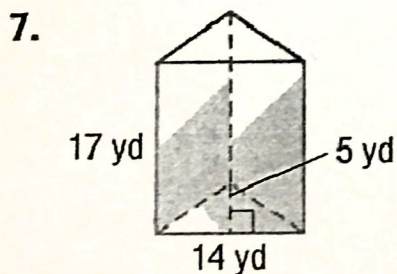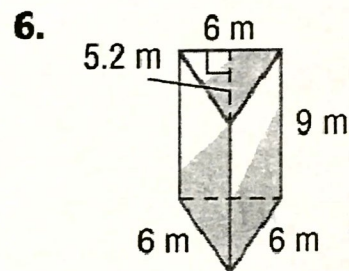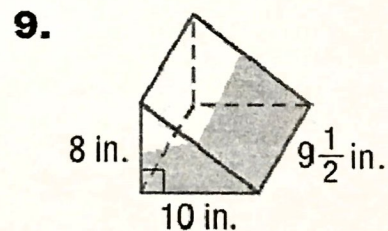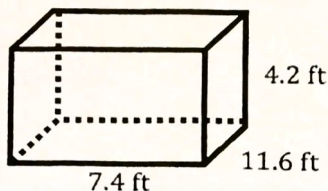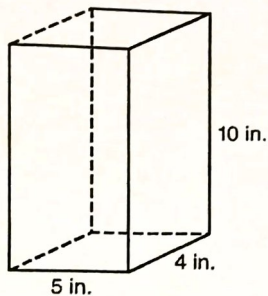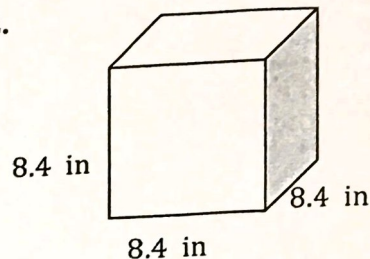
10.

4.2 ft

11.6 ft

7.4 ft

11.

10 in.

4 in.

5 in.

$V = 200 \text{ in}^3$

12.

8.4 in

8.4 in

8.4 in

13. Rectangular prism: length of 6 yds; width of 5 yds; and height of 3 yds.

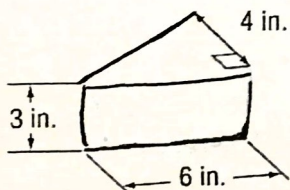$V = 90 \text{ yd}^3$

14. Rectangular prism: length of 16.5 mm; width of 8.4 mm; height of 32 mm

15. Cube: length of 6.2 ft

$V = 238.328$

238.3 ft^3

16. Dirk has a triangular-shaped piece of cheesecake in his lunch. Find the volume of the piece of cheesecake.
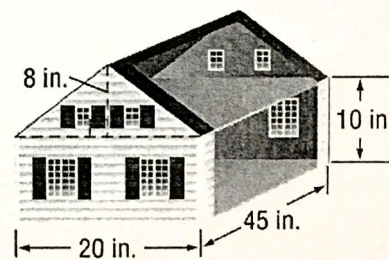
4 in.

3 in.

6 in.

17. A wheelchair ramp is in the shape of a triangular prism. The base has an area of 37.4 square yards and the ramp as a height of 5 yards. Find the volume of the ramp.

$V = 187 \text{ yd}^3$

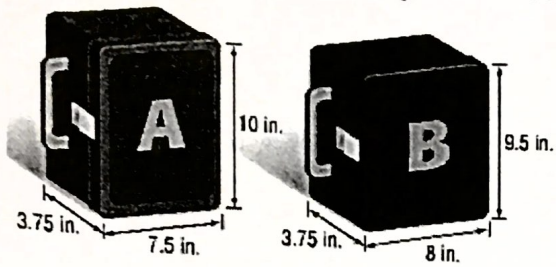**Darcy built the dollhouse shown below.**

18. What is the volume of the first floor?

8 in.

10 in.

45 in.

20 in.

19. What is the volume of the attic space?

$V = 3600 \text{ in}^3$

20. Which lunchbox holds more? (Find the volume of each lunchbox)

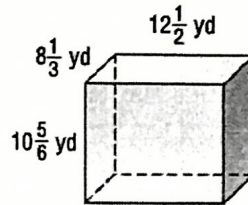Lunchbox A: 10 in. / 3.75 in. / 7.5 in.

Lunchbox B: 9.5 in. / 3.75 in. / 8 in.

21. What is the surface area of the rectangular prism shown?

Ⓐ $600\frac{1}{2}$ yd²

Ⓒ 662.7 yd²

Ⓑ 659.7 yd²

Ⓓ 700 yd²

$12\frac{1}{2}$ yd

$8\frac{1}{3}$ yd

$10\frac{5}{6}$ yd

22. Which of the following expressions represents the surface area of a cube with side length w?

Ⓐ w^3

Ⓑ $6w^2$

Ⓒ $6w^3$

Ⓓ $2w + 4w^2$

23. How much cardboard is needed to make the box shown?

Ⓕ 37.5 ft²

Ⓖ 24.4 ft²

Ⓗ 8 ft²

Ⓘ 6.1 ft²

2 ft / 1.6 ft / 2.5 ft