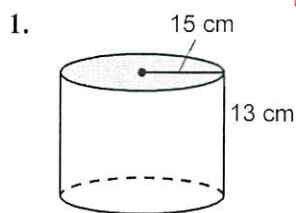


Chapter 8 Practice Quiz

Find the volume of each solid. Round to the nearest tenth if necessary.

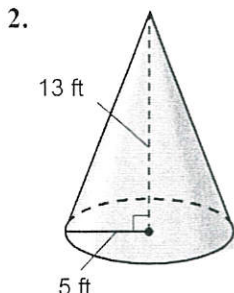


$$V = \pi r^2 h$$

$$= (3.14)(15)^2(13)$$

$$\approx 9184.5$$

1. 9184.5 cm³

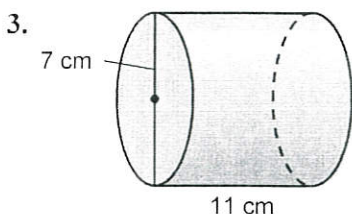


$$V = \frac{1}{3} \pi r^2 h$$

$$= \frac{1}{3} (3.14)(5)^2(13)$$

$$\approx 340.166\dots$$

2. 340.17 ft³



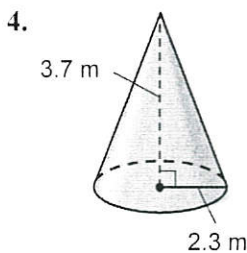
$$r = \frac{7}{2} = 3.5$$

$$V = \pi r^2 h$$

$$= 3.14(3.5)^2(11)$$

$$= 423.115$$

3. 423.12 cm³

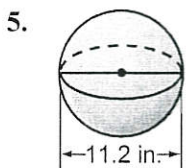


$$V = \frac{1}{3} \pi r^2 h$$

$$= \frac{1}{3} (3.14)(2.3)^2(3.7)$$

$$= 18.825$$

4. 18.83 m³



$$r = \frac{11.2}{2} = 5.6$$

$$V = \frac{4}{3} \pi r^3$$

$$= \frac{4}{3} (3.14)(5.6)^3 = 735.2456\dots$$

5. 735.25 in³

6. **CANNED VEGETABLES** A can of tomatoes has a base diameter of 8.5 centimeters and a height of 13 centimeters. What is the volume of the can? Round to the nearest tenth if necessary.

$$r = \frac{8.5}{2} = 4.25$$

$$V = (3.14)(4.25)^2(13)$$

$$= 737.31125$$

6. 737.31 cm³