Read each problem and solve.

1. The outside of an aquarium tank is 50 cm long, 50 cm wide, and 30 cm high. It is open at the top. The glass used to make the tank is 1 cm thick. How much water can the tank hold?

   \[ l = 50 - 2 = 48, \quad w = 50 - 2 = 48, \quad h = 30 - 1 = 29 \]

   \[ V = l \times w \times h \]

   \[ = 48 \times 48 \times 29 \]

   \[ = 66,816 \text{ cm}^3 \]

2. Arnie keeps his pet snake in an open-topped glass cage. The outside of the cage is 73 cm long, 60 cm wide, and 38 cm high. The glass used to make the cage is 0.5 cm thick. What is the inside volume of the cage?

   \[ V = 159,300 \text{ cm}^3 \]

3. A gift box measures 14 in. by 12 in. by 6 in. How much wrapping paper is needed to exactly cover the box?

4. A display number cube measures 20 in. on a side. The sides are numbered 1–6. The odd-numbered sides are covered in blue fabric and the even-numbered sides are covered in red fabric. How much red fabric was used?

5. The caps on the tops of staircase posts are shaped like square pyramids. The side length of the base of each cap is 4 inches. The height of the face of each cap is 5 inches. What is the surface area of the caps for two posts?

6. A water irrigation tank is shaped like a cube and has a side length of \(2\frac{1}{2}\) feet. How many cubic feet of water are needed to completely fill the tank?