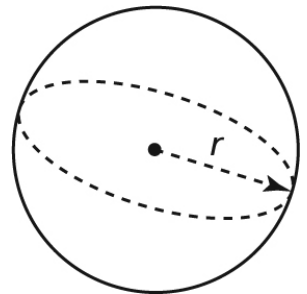# Sec. 1.6- Surface Area & Volume of a Sphere

**1.** The diameter of a softball is approximately 4 in.

Determine the surface area of a softball to the nearest square inch.

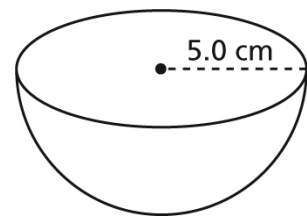**2.** The surface area of a soccer ball is approximately 250 square inches.

What is the diameter of a soccer ball to the nearest tenth of an inch?

**3.** The moon approximates a sphere with diameter 2160 mi. What is the approximate volume of the moon?

**4.** A hemisphere has radius 5.0 cm.

  **a)** What is the surface area of the hemisphere to the nearest tenth of a square centimetre?



5.0 cm

  **b)** What is the volume of the hemisphere to the nearest tenth of a cubic centimetre?