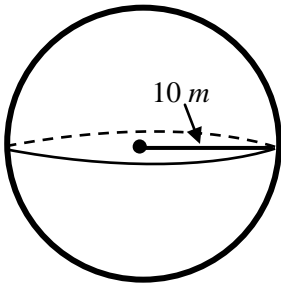


## Lesson 4.8 ~ Volume of Spheres

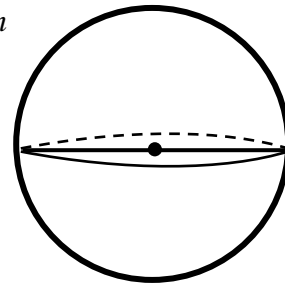
Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

**Find the volume of each sphere. Use 3.14 for  $\pi$ . Round to the nearest hundredth.**

1.



2.  $d = 18\text{ cm}$

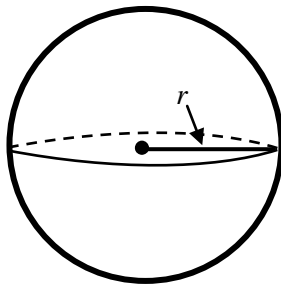


3. Drake has a beach ball with a diameter close to  $12\text{ in.}$  Find the volume of this beach ball.

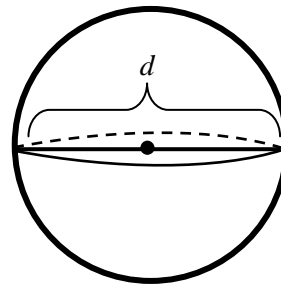
4. A spherical juice container has a radius of  $25\text{ mm.}$  How much juice can the container hold?

**Find each missing measure. Use 3.14 for  $\pi$ .**

5. Volume  $\approx 1436.03\text{ m}^3$



6. Volume  $\approx 7234.56\text{ in}^3$



7. A bowling ball has a volume of  $267.947$  cubic inches. What is the radius of the bowling ball? Use 3.14 for  $\pi$ .

8. Geraldo's garden has a rainwater catcher in the shape of a sphere that has a volume of about  $33.49$  cubic feet. What is the diameter of the sphere? Use 3.14 for  $\pi$ .

9. A baseball fits snugly inside a cubical box that is 3 inches on each side.

a. Find the volume of the cubical box.

b. Find the volume of the baseball that fits snugly inside the box. Use 3.14 for  $\pi$ .

c. How much empty space remains in the box when the baseball is inside of it?