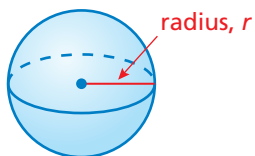


REVIEW: Volumes of Spheres

Name _____

Key Concept and Vocabulary

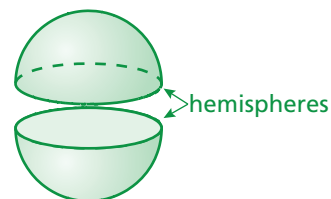


$$V = \frac{4}{3}\pi r^3$$



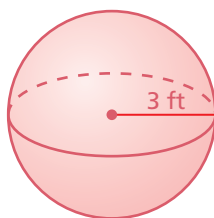
Visual Model

A hemisphere is one-half of a sphere.



Skill Example

1.



$$\begin{aligned} V &= \frac{4}{3}\pi \cdot 3^2 \\ &= 36\pi \text{ ft}^3 \end{aligned}$$

Application Example

2. Find the volume of the globe.

$$\begin{aligned} V &= \frac{4}{3}\pi \cdot 9^3 \\ &= 972\pi \end{aligned}$$

The volume is 972π cubic inches.

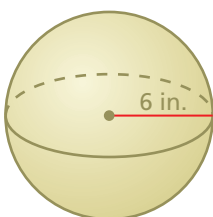


PRACTICE MAKES PURR-FECT®

Check your answers at BigIdeasMath.com.

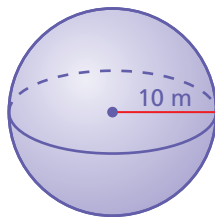
Find the volume of the sphere.

3.



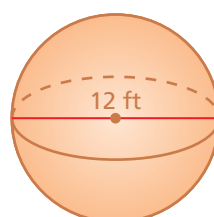
$$V = \underline{\hspace{2cm}}$$

4.



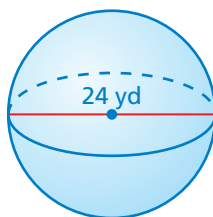
$$V = \underline{\hspace{2cm}}$$

5.



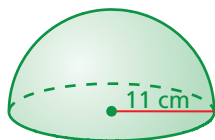
$$V = \underline{\hspace{2cm}}$$

6.



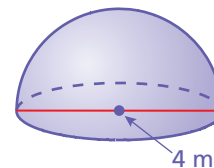
$$V = \underline{\hspace{2cm}}$$

7.



$$V = \underline{\hspace{2cm}}$$

8.



$$V = \underline{\hspace{2cm}}$$

9. **VOLLEYBALL** A box is in the shape of a cube with edge lengths of 8 inches. Will the volleyball fit inside the box? _____



$$\text{Volume} = 320 \text{ in.}^3$$