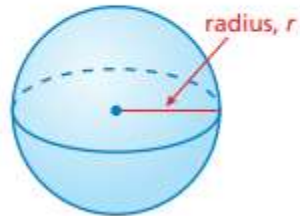


Key Idea

Volume of a Sphere

Words The volume V of a sphere is the product of $\frac{4}{3}\pi$ and the cube of the radius of the sphere.

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

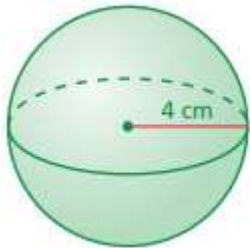


Finding Volumes of Spheres

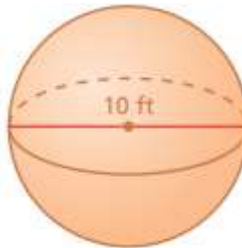
Ex:) Find the volume of the sphere. Round your answer to the nearest tenth.

Notes:

A.



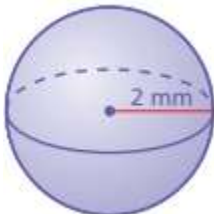
B.



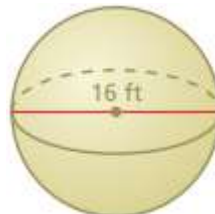
OYO:) Find the volume of the sphere. Round your answer to the nearest tenth.

Notes:

A.



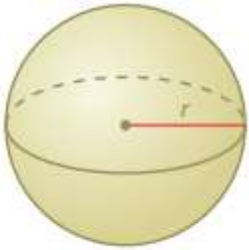
B.



Finding the Radius of a Sphere

Ex:) Find the radius of the sphere. Round your answer to the nearest tenth.

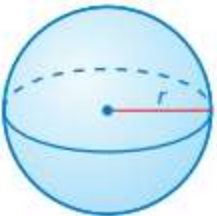
Notes:



$$\text{Volume} = 288\pi \text{ in.}^3$$

OYO:) Find the radius of the sphere. Round your answer to the nearest tenth.

Notes:

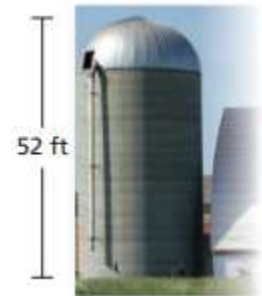


$$\text{Volume} = 36\pi \text{ m}^3$$

Modeling Real Life

Ex:) A **hemisphere** is one-half of a sphere. The top of the silo is a hemisphere with a radius of 12 feet. What is the volume of the silo? Round your answer to the nearest thousand.

Notes:



A composite solid is a solid made up of two or more three-dimensional figures.

OYO:) In sphering, a person is secured inside a small, hollow sphere that is surrounded by a larger sphere. The space between the spheres is inflated with air. What is the volume of the inflated space? Explain.

Notes:

