

Main Ideas/ Questions

Types of Figures

Basic Volume Formulas

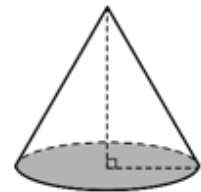
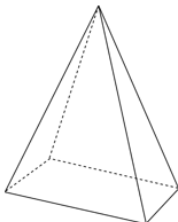
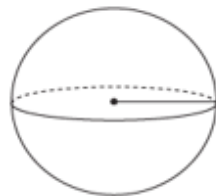
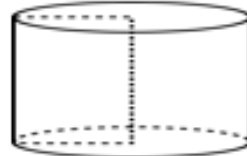
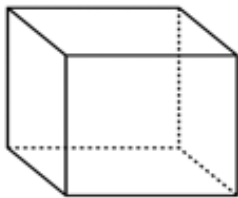
Specific Volume Formulas

Notes

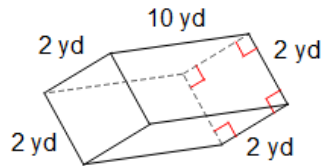
- **Volume** – Calculates the _____ of an object (how much stuff can it hold)
- **Prism** – A solid object with two identical ends and flat sides
- **Pyramid** – Has **1/3** the volume of a prism
- **Cylinder** – A solid object with two identical circles and smooth sides
- **Cone** – Has **1/3** the volume of a cylinder
- **Sphere** – Calculates the volume of a 3D circle

Prisms/Cylinders → Volume = (Base area)*(height)

Pyramids/Cones → Volume = $\frac{1}{3}$ (Base area)*(height)



1. Find the volume of the figure.



2. What is the volume of a square based pyramid with a base side length of 16 meters and a height of 15 meters?

**Main Ideas/
Questions**

Examples

Notes

3. A soup can has a diameter of 8 cm and height of 10.5 cm. How much soup can it hold?

4. If a sphere has a radius of 3 cm and a new sphere's radius is tripled. What would the new volume be of the new sphere?

5. If an ice cream cone has a diameter of 1 inch and is 3 inches long. How much ice cream can it hold?

6. If a cylinder has a base area of $144\pi \text{ ft}^2$ and a height of 3 ft. What is the volume of the figure?

7. If a prism has a base area of 80 cm^2 and a height of 2.89 cm. What is the volume of the figure?