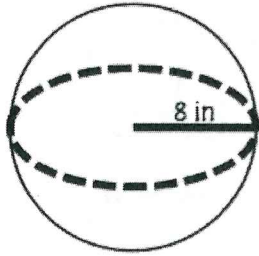


Volume of Sphere : $V = \frac{4}{3} \pi r^3$

1) FIND THE VOLUME:



$$2144.66 \text{ in}^3$$

$$V = \frac{4}{3} \pi r^3 \quad V = \frac{4}{3} \pi \cdot 8^3$$

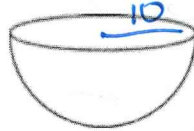
2) FIND THE VOLUME:



$$V = \frac{4}{3} \pi 11^3$$

$$5575.28$$

3) You have a bowl in the kitchen that is exactly half of a sphere. The radius of the bowl is 10 inches. How much food can the bowl hold?



$$V = \frac{4}{3} \pi 10^3$$

$$4128.79$$

$$\div 2 \text{ hemisphere}$$

$$2094.40 \text{ in}^3$$

4) A sphere has a volume of 7238.23 in.³ What is the length of the radius?

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

$$7238.23 = \frac{4}{3} \pi r^3$$

$$\frac{7238.23}{\frac{4}{3} \pi} = r^3$$

$$\frac{7238.23}{4.19} = r^3$$

$$1727.50 = r^3$$

$$\sqrt[3]{1727.50}$$

$$\approx 11.99 \approx 12$$