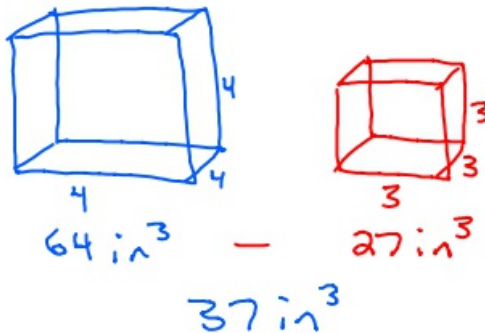


3-2-20 2nd Geo

- ① How much space is left in a 4 inch cube if a 3 inch cube is placed inside it?



- ② What is the volume of a sphere that has a radius of 6 cm?

$$\begin{aligned}V &= \frac{4}{3} \pi r^3 \\&= \frac{4}{3} \cdot \pi \cdot 6^3 \\&\approx 904.8 \text{ cm}^3\end{aligned}$$

- ③ What is the volume of a cylinder with a radius of 6 cm and height of 10 cm?

$$\begin{aligned}V &= \pi r^2 h \\V &= \pi \cdot 6^2 \cdot 10 \\V &= 360\pi \\&\approx 1131 \text{ cm}^3\end{aligned}$$



④ What is the surface area of a sphere with a radius of 5 cm?

$$\begin{aligned} S.A. &= 4\pi r^2 \\ &= 4 \cdot \pi \cdot 5^2 \\ &= 100\pi \\ &\approx 314.2 \text{ cm}^2 \end{aligned}$$

