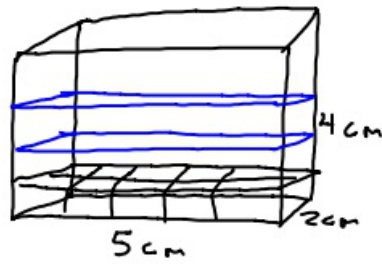
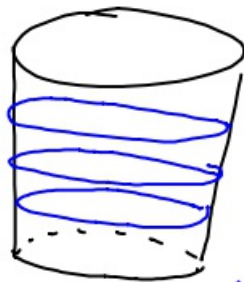


2-16-18 5th Geo

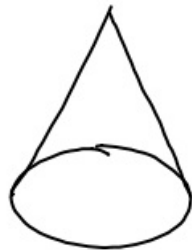


$$V = 5 \cdot 2 \cdot 4 = 40 \text{ cm}^3$$



$$V = \pi r^2 \cdot h$$

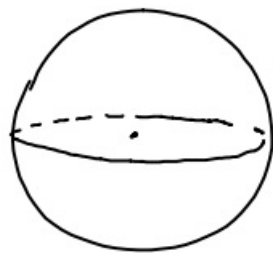
Area x height



$$V = \frac{1}{3} \pi r^2 \cdot h$$



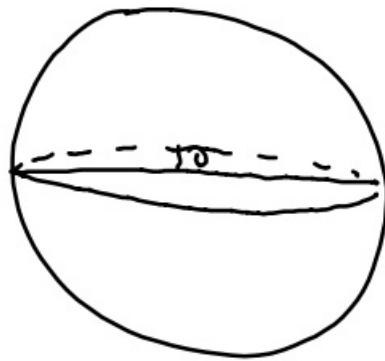
$$V = \frac{1}{3} b^2 \cdot h$$



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

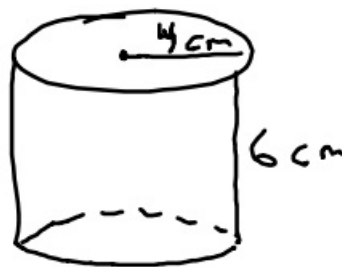
$$S.A. = 4 \cdot \pi r^2$$

- ① What is the volume of a sphere with a diameter of 10 cm?



$$\begin{aligned}V &= \frac{4}{3}\pi r^3 \\ &= \frac{4}{3} \cdot \pi \cdot 5^3 \\ &\approx 523.6 \text{ cm}^3\end{aligned}$$

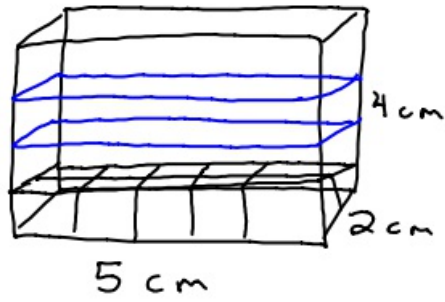
②



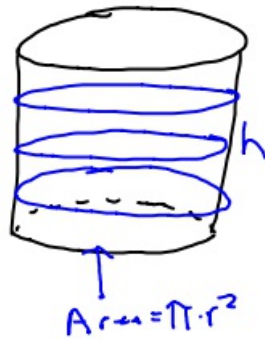
$$\begin{aligned}V &= \pi r^2 \cdot h \\ V &= \pi \cdot 4^2 \cdot 6 \\ &\approx 301.6 \text{ cm}^3\end{aligned}$$

- ③ How much volume is left in a sphere that has a radius of 5 if a sphere with radius of 4 is put inside it?

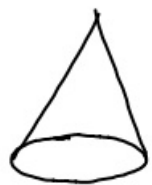
$$\begin{aligned}&\frac{5 \text{ sphere}}{\frac{4}{3}\pi \cdot 5^3} \quad - \quad \frac{4 \text{ sphere}}{\frac{4}{3}\pi \cdot 4^3} \\ &\approx 255.5 \text{ cm}^3\end{aligned}$$



$$V = l \cdot w \cdot h \leftarrow \text{Think about it.}$$
$$5 \cdot 2 \cdot 4$$
$$40 \text{ cm}^3$$



$$V = \pi r^2 \cdot h$$



$$V = \frac{1}{3} \pi r^2 \cdot h$$



$$V = \frac{4}{3} \pi r^3$$
$$S.A. = 4 \cdot \pi r^2$$

