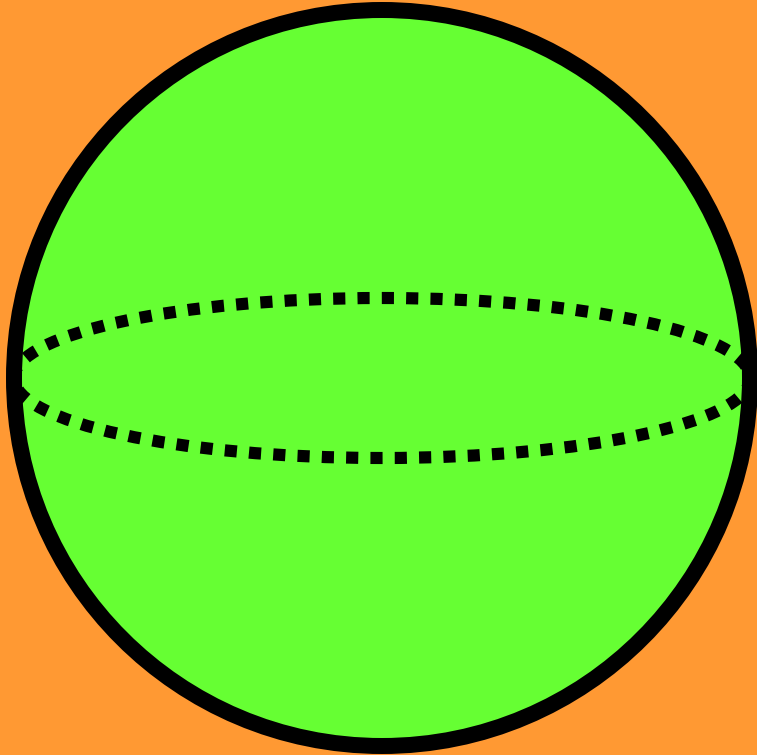


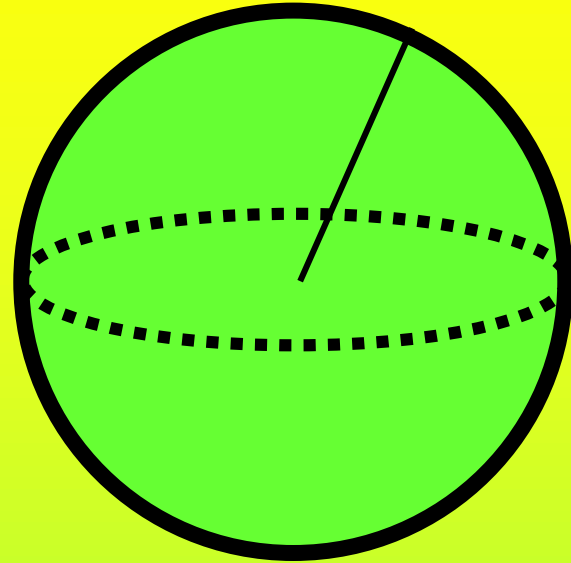
Spheres



Sphere - the set of all points a given distance away from a center point

Volume -

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

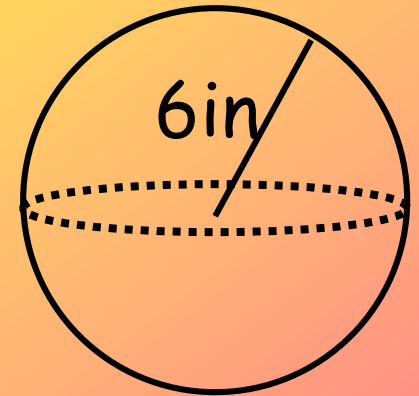


Total Area -

$$T.A. = 4\pi r^2$$

Example 1 - Find the Total Area and Volume of the Sphere

Radius - 6in



$$\text{Volume - } V = \frac{4}{3}\pi r^3 \quad V = \frac{4}{3}\pi 6^3$$

$$V = 288\pi \text{in}^3$$

$$\text{Total Area - } T.A = 4\pi r^2$$

$$T.A = 4\pi 6^2$$

$$T.A = 144\pi \text{in}^2$$

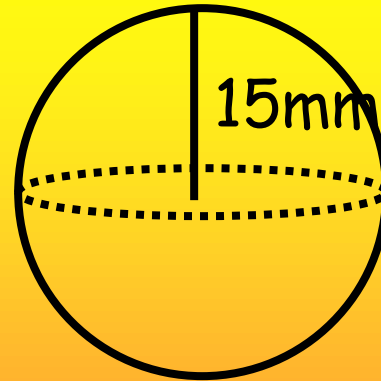
Why is there
no LATERAL
AREA?!?!?

Example 2

$$r = 15\text{mm}$$

$$V = 4500\pi\text{mm}^3$$

$$\text{T.A.} = 900\pi\text{mm}^2$$



Example 3: $C = 20\pi\text{in}$

$$r = 10\text{in}$$

$$V = 1333.33\pi\text{in}^3$$

$$\text{T.A.} = 400\pi\text{in}^2$$

