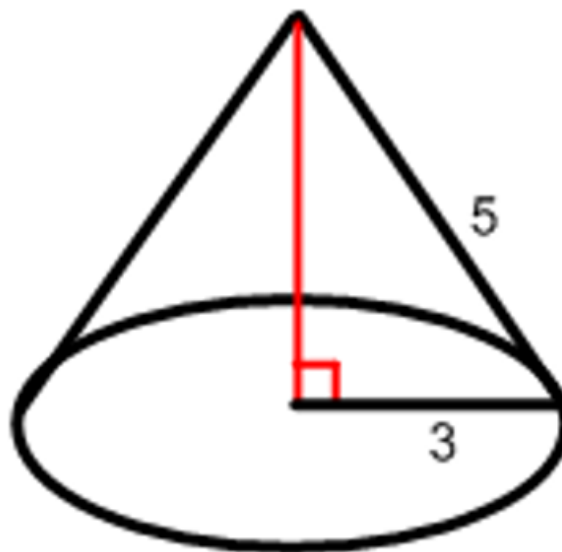


Bell Work

Find the volume

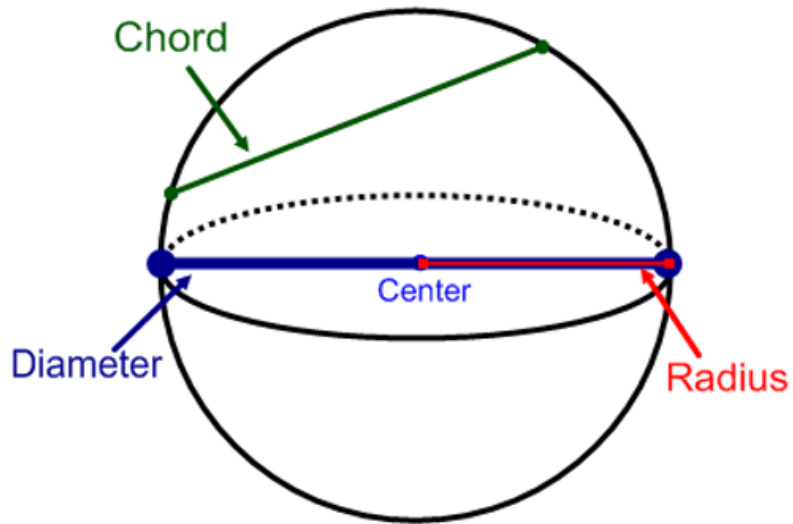


10.3 Volumes of Spheres

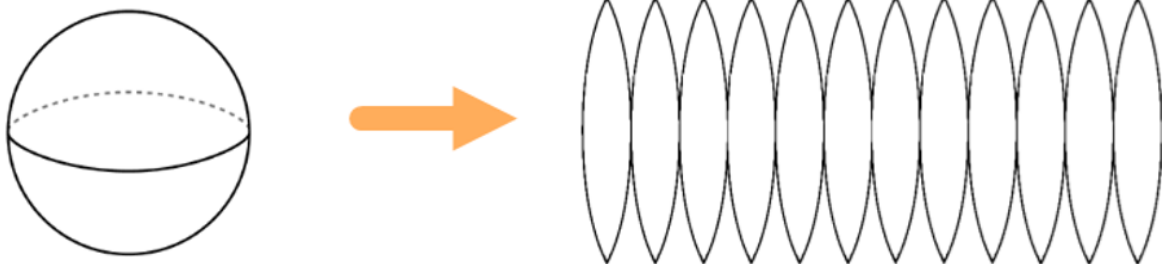
Obj: Students will be able to find volume of spheres.

Spheres

- A sphere is the set of all points in space equidistant from a given point. This point is called the center of the sphere.

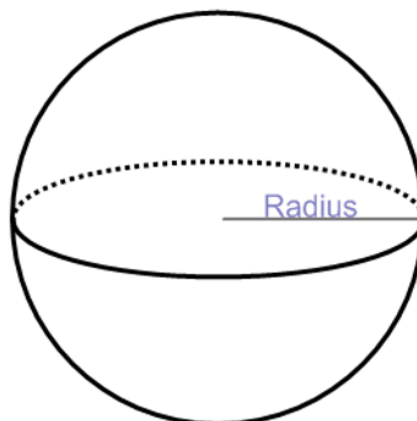


The net of a sphere:



Volume of a Sphere

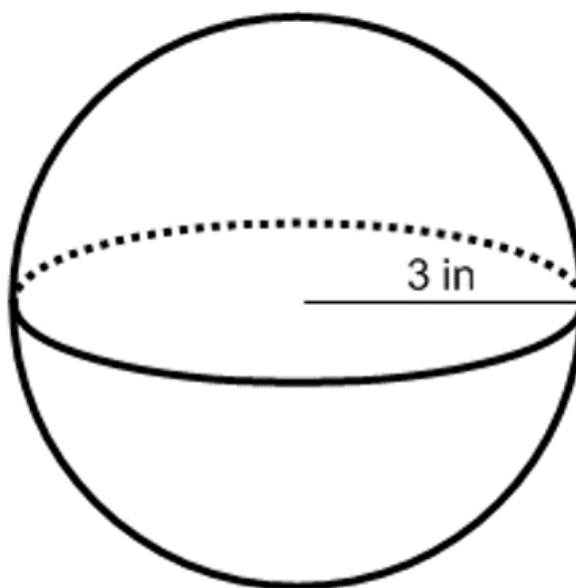
$$V = \frac{4}{3}\pi r^3$$



r = radius of sphere

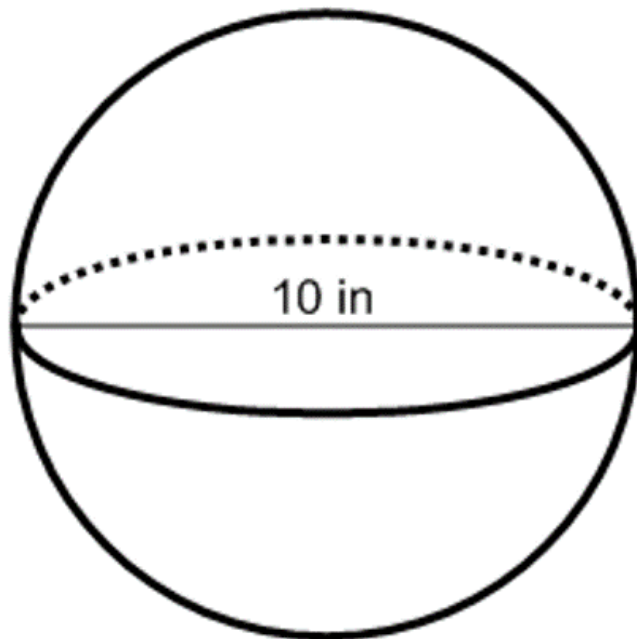
Example

What is the volume?

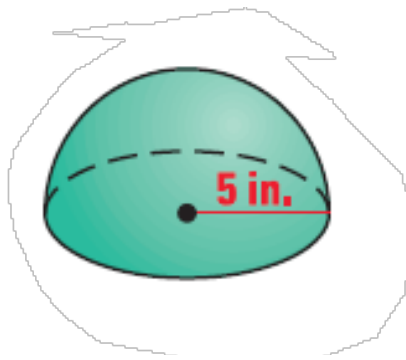


Example

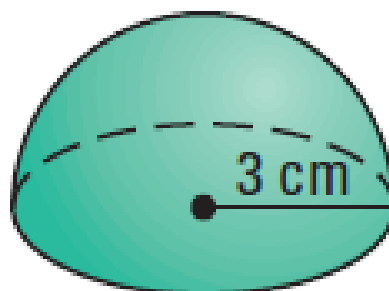
What is the volume?



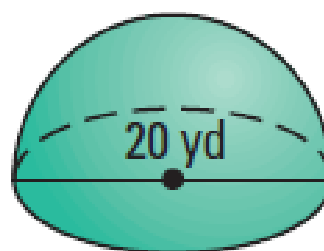
How do you think we would find the volume of a hemisphere?



What is the volume of the hemisphere?



What is the volume of the hemisphere?



We can find the volume of spheres or hemispheres when given circumference or area of the great circle.

Remember: $C = 2\pi r$ $A = \pi r^2$

You will need to solve for the radius so you can use the volume formula.

Find the volume of the sphere if:

- a. the circumference of the great circle is 22 in
- b. the area of the great circle is 35 m²

Find the volume of the hemisphere if:

- a. the circumference of the great circle is 18 ft

- b. the area of the great circle is 40 in^2