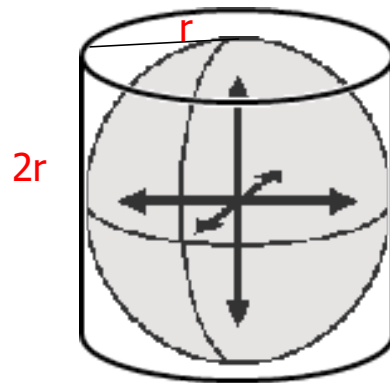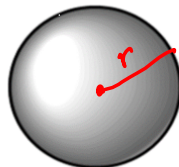What is the volume of this cylinder?

r

2r

The sphere is what portion of the cylinder?

Volume of a sphere is $\frac{4}{3}\pi r^3$

Spheres

r

All points the same distance from a given point.
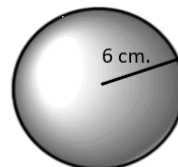
Parts: Center

Radius

6

Volume Formula:

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

$V = \frac{4}{3}\pi (6)^3$

$= \frac{4}{3}\pi (216)$

$= \frac{864\pi}{3}$

$= 288\pi$ cu. cm

6 cm.