

Sphere (C)

If a sphere has radius R then its volume is

$$\frac{4}{3}\pi R^3$$

Exercises

1. What is the volume of a sphere whose radius is 3 meters?
2. What is the radius of a sphere whose volume is one liter?
3. If the radius of a sphere is tripled, what is the effect on the volume?
4. If the surface area of a sphere is doubled, what is the effect on the volume?
5. If the volume of a sphere is halved, what is the effect on the radius?
6. If I reduce the volume of a sphere to one third of its current volume, what is the effect on the surface area?
7. A sphere is circumscribed about a cube of volume 1 cubic meter. What is the volume of the sphere?