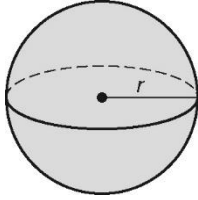
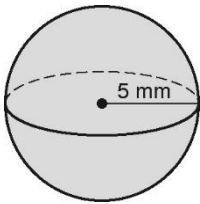
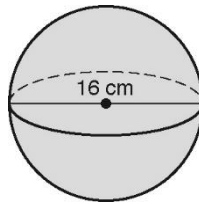


Volume and Surface Area of a Sphere		
Volume	The volume of a sphere with radius r is $V = \frac{4}{3}\pi r^3.$	
Surface Area	The surface area of a sphere with radius r is $S = 4\pi r^2.$	

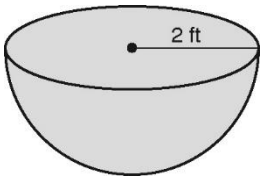
1. Find the volume of the sphere



2. Find the volume of the sphere

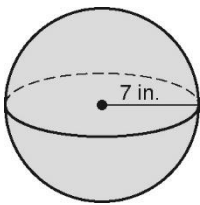


3. Find the volume of the hemisphere

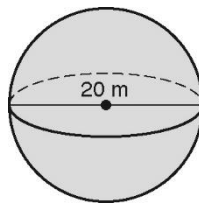


4. Find the radius of a sphere with volume $7776\pi \text{ in}^3$.

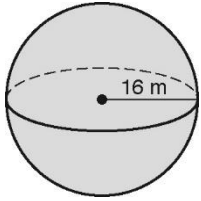
5. Find the surface area of the sphere



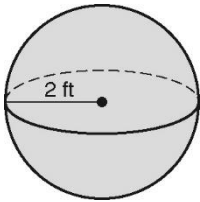
6. Find the surface area of the sphere



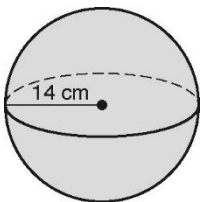
7. The radius of the sphere is multiplied by $\frac{1}{4}$. Find the original surface area and the surface area after the dimensions are reduced. Describe the effect on the surface area. State the factor by which the surface area changed.



8. Describe the change in surface area if the radius is multiplied by 4. State the factor by which the surface area changed.

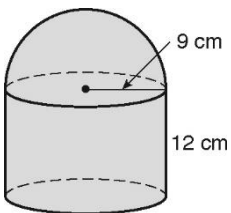


9. Describe the change in surface area if the radius is multiplied by $\frac{1}{2}$. State the factor by which the surface area changed.



10. The surface area of a sphere is 1000 cm^2 . What is the surface area of the sphere if its dimensions are multiplied by $\frac{1}{5}$?

11. Find the volume and surface area of the composite figure rounded to the nearest tenth.



12. Find the volume and surface area of the composite figure rounded to the nearest tenth.

