

## Surface of a Sphere (C)

A sphere with **radius**  $R$  and center  $C$  is the set of all points in the space whose distance from  $C$  is  $R$ . The surface area of a sphere of radius  $R$  is  $4\pi R^2$ .

### Exercises

1. What is the surface area of a sphere whose radius is 2 feet?
2. What is the radius of a sphere whose surface area is 12 square feet?
3. Suppose that radius of a sphere is doubled? What happens to its surface area?
4. By what proportion should I increase the radius of a sphere to triple its surface area?