



Math Virtual Learning

Geometry

April 27, 2020

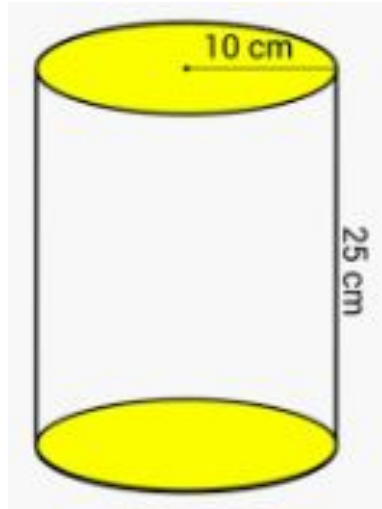


Geometry

Lesson: April 27, 2020

Objective/Learning Target:
Calculate the surface area of spheres

Bell Ringer: Find the surface area of the cylinder.





Bell Ringer Answer: 200π square centimeters

Let's Get Started: Go through the following slides and try the example problems.



DEFINITIONS:

Cylinder: The set of all points equidistant from a given point.

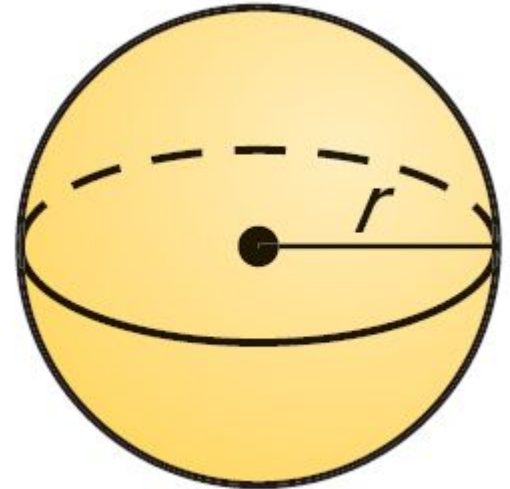
Surface Area: Sum of the area of each face of the solid.

Surface Area of a Sphere:

$$SA = 4\pi r^2$$

π = pi

r = radius of the sphere



Example Problem: Find the surface area of the sphere.

$$SA = 4\pi r^2$$

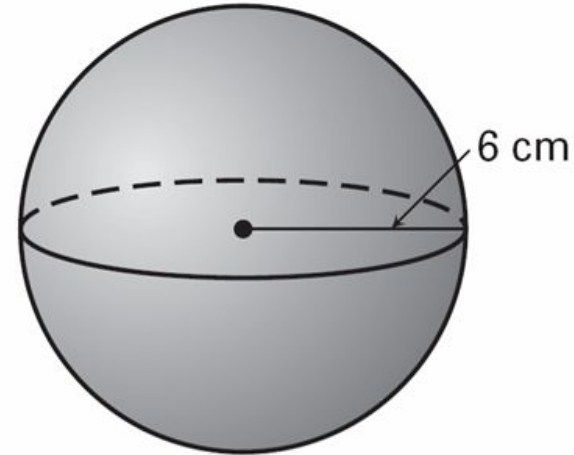
$$SA = 2\pi(6)^2$$

$$SA = 2\pi(36)$$

$$SA = 144\pi \text{ square centimeters}$$

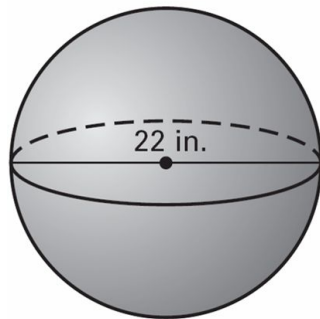
r = radius of the sphere

r = 6 centimeters

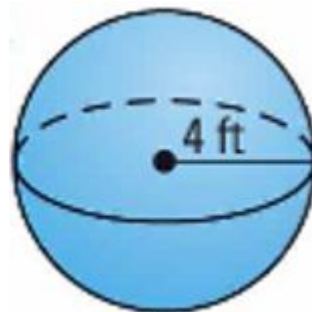


Try the next practice problems on your own! Find the surface area of each sphere.

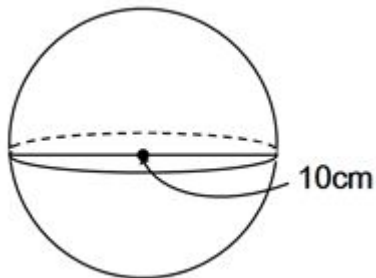
1)



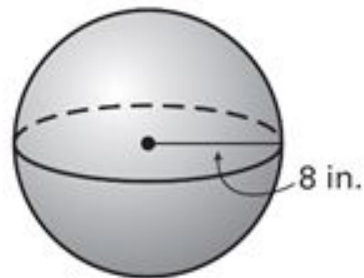
2)



3)



4)



Answer Key:

Here you will find the answers to the previous four questions.
Check your answers below.

- 1) 484π square inches
- 2) 64π square feet
- 3) 100π square centimeters
- 4) 256π square inches



Additional Resources:

Click on the link below to get additional practice and to check your understanding!

[Surface Area of Spheres Practice](#)