

# MATH



## Video Study Guide: The Pythagorean Theorem and Spheres

1. A right triangle is drawn inside a sphere such that the legs of the triangle are both radii. If the length of the hypotenuse is 10 cm, what is the radius of the sphere? What is the volume?

2. Two points on the surface of a sphere are separated by  $90^\circ$ . If the straight-line distance between those two points is 12 cm, what is the radius of the sphere? What is the volume?