

April 13<sup>th</sup>

A cube of sides 6cm is placed inside a sphere such that its eight vertices lie upon the surface.

---

Find the radius of the sphere.

The radius is the distance from the common centre of the sphere and cube to each vertex.

The diagonal has length  $\sqrt{6^2 + 6^2 + 6^2} = 6\sqrt{3}$

Therefore the radius =  $3\sqrt{3}$  **cm**