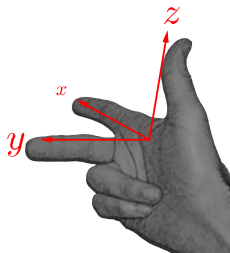


Question

Holding up your right hand as a Cartesian coordinate system, use your left hand to point to the following locations expressed in spherical coordinates.



- ▶ $(\rho, \theta, \phi) = (1, 0, 0)$
- ▶ $(\rho, \theta, \phi) = (\sqrt{2}, \frac{\pi}{4}, \frac{\pi}{2})$
- ▶ $(\rho, \theta, \phi) = (\sqrt{2}, \frac{\pi}{2}, \frac{\pi}{4})$
- ▶ $(\rho, \theta, \phi) = (\sqrt{2}, \pi, \frac{\pi}{4})$
- ▶ $(\rho, \theta, \phi) = (\sqrt{3}, \frac{\pi}{4}, \arcsin(\sqrt{\frac{2}{3}}))$