

The distance from a point to the xz -plane is the absolute value of the y -coordinate of the point. $Q(-1, -2, 7)$ has the y -coordinate with the smallest absolute value, so Q is the point closest to the xz -plane. $R(0, 5, 5)$ must lie in the yz -plane since the distance from R to the yz -plane, given by the x -coordinate of R , is 0.