

10.1 3-Dimensional Coordinate Systems

In a 2D plane, we are able to move up left and right or up and down. So we can move horizontally and vertically in a 2D plane.

$$R^2 = (x, y) \mid x, y \in R$$

While in 3D, we can move along three axes.

$$R^3 = (x, y, z) \mid x, y, z \in R$$

The 3 planes divide space into 8 parts called octants.