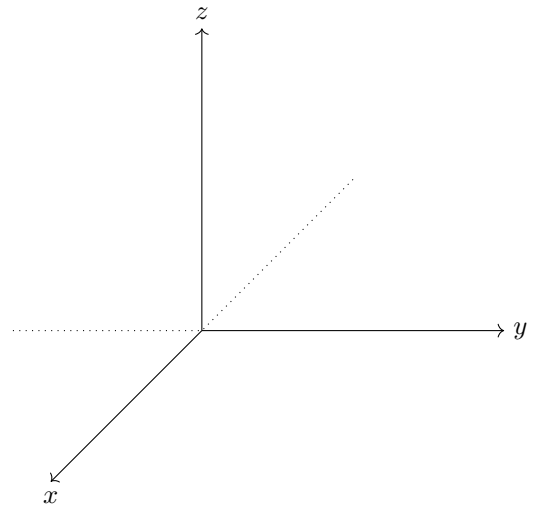
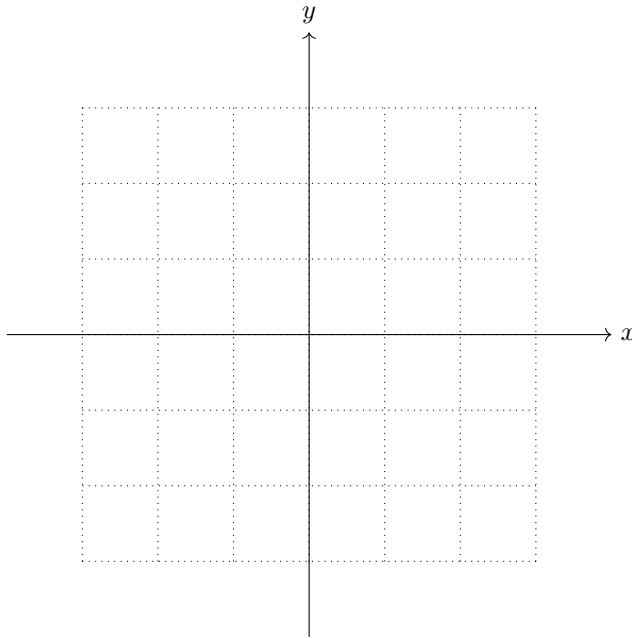


MATH 2D Prep: Level Sets and Surfaces

1. Sketch the level sets $x^2 - y^2 = C$ for $C = 0, 1, 2$ on xy -plane, then use the level sets to sketch the graph of $z = x^2 - y^2$ in \mathbb{R}^3 .



2. Sketch the level set $x^2 + y^2 = 1$ in \mathbb{R}^3 .

