1. (§14.1, # 13, 10 points) Find the equation of the plane through P(2, 3, 0) with normal vector
\( n = \langle -1, 2, -3 \rangle \) and write it in the form: \( Ax + By + Cz = D \).

\[-1(x-2) + 2(y-3) - 3(z-0) = 0\]

\[2 - x + 2y - 6 - 3z = 0\]

\[-x + 2y - 3z = 4\]

2. (§14.1, # 41, 10 points) Sketch the cylinder defined below. Be sure to label your axes, scales, and any
points where the surface intersects a coordinate axis.

\[x^2 + z^2 = 4\]