1. Parametrize and give bounds for the portion of the plane $z = 1$ lying above the rectangle with vertices (0,0), (2,0), (2,3), and (0,3).

2. Parametrize and give bounds for the portion of the cylinder with radius 4 centered around the y-axis between $y = 1$ and $y = 9$.

3. Parametrize and give bounds for the portion of the plane $x = 10$ that lies within the cylinder with equation $y^2 + z^2 = 1$.