Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Parametrize and give bounds for the portion of the paraboloid $x = y^2 + z^2$ between y = 0, y = 2, z = 0, and z = 3.

2. Parametrize and give bounds for the portion of the cylinder with radius 3 centered around the y-axis between y = 0 and y = 5.

3. Parametrize and give bounds for a sphere with radius 5, centered at the origin.