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

1. Parametrize and give bounds for the rectangle with vertices (3,0,0), (3,2,0), (3,2,5), and (3,0,5).

2. Parametrize and give bounds for the portion of a cylinder with radius 5 centered on the $y$-axis between $z = 2$ and $z = 20$. 