



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 right half (i.e. the portion with positive  $y$  coordinates) of the cylinder with radius  $a$  and centered on the  $x$ -axis between  $x = 0$  and  $x = 5$ .
3. Parametrize and give bounds for the portion to the right of  $y = 0$  of a sphere with radius 5, centered at the origin.