Math 001D Assignment 15.6 Ans_____

**Instructions**: Write complete solutions to the following problems in the space provided. Be sure to supply all the necessary steps that lead to your answers

1. Find the area of the surface. The part of the plane $3x + 5y + z = 15$ that lies in the first octant Ans_____

2. Find the area of the surface. The part of the cylinder $y^2 + z^2 = 9$ that lies above the rectangle with vertices (0, 0), (8, 0), (0, 2), and (8, 2) Ans_____

3. Find the area of the surface. The part of the surface $z = x$ ıat lies within the cylinder $x^2 + y^2 = 64$ Ans_____

4. Find the area of the surface. The part of the surface $z = x^2 + 1$ that lies above the triangle with vertices $(0,0),(1,0),(1,2)$ Ans_____