Worksheet 2 / 15 points

Name: Section: 2 4 (circle one)

1. Give the parametric equations of the line passing through the points $(0, 3, 4)$ and $(3, 2, 0)$.

2. Find the equation of the plane containing the points $(1, 0, 1)$, $(1, 2, 0)$ and $(0, 2, 1)$.

3. Determine the point of intersection between the line from problem 1 and the plane from problem 2.

4. Sketch a graph of the ellipsoid $\frac{x^2}{4} + \frac{y^2}{9} + z^2 = 1$.

5. Sketch a graph of the hyperbolic paraboloid $z^2 - y^2 = x$.