MATE 3063 assignment 1: section 12.6

1. pb 1 p.839.

2. pb 9 p.839.

3. Do all of 21–28, but hand in the solution of three of your choice.

4. Use traces to sketch and identify the surface:

   (a) $y^2 = x^2 + 4z^2$.

   (b) $x^2 + 9y^2 + 9z^2 = 9$.

   (c) $x = y^2 - z^2$.

5. Reduce the equation to one of the standard forms, classify the surface, and sketch it:

   (a) $x^2 - 4x - 2y^2 - z^2 = 0$.

   (b) $4x^2 + 9y^2 + z = 1$.

6–9. Problems 43, 45, 47, 52 of this section.