MATH 2310 HOMEWORK 3

Due Friday 9 October (or earlier).

(1) Section 3.2, p.155, Exercise 1(e).

(2) Section 3.2, p.155, Exercise 5.

(3) Find the determinant of the matrix in Section 3.3, p.164, Exercise 4, by expansion along the fourth column.

(4) Section 3.4, p.169, Exercise 4.

(5) Section 3.5, p.172, Exercise 1.

(6) Supplementary exercises, p. 174, Exercise 5.

(7) Show that the matrix

$$\begin{bmatrix} 1 & a & 0 \\ 0 & 1 & a \\ 0 & 0 & 1 \end{bmatrix}$$

is nonsingular for any value of a, and compute its inverse using any method you wish.

(8) Chapter Review, p. 174, Exercises 1-7. Decide whether each of the statements is true or false, and give a brief reason for your answer.