Math 128A, problem set 02
Outline due: Wed Feb 04
Due: Mon Feb 09
Last revision due: Mon Mar 16

Problems to be done, but not turned in: (Ch. 2) 7, 13, 15, 17, 23, 27, 33; (Ch. 3) 1, 5, 7, 11, 13.

Fun: (Ch. 2) 31, 36.

Problems to be turned in:

1. (Ch. 2) 14.
2. (Ch. 2) 16.
3. (Ch. 2) 24.
4. (Ch. 2) 32(a,b).
5. Let
$$G = \left\{ \left. \begin{bmatrix} a & b & c \\ 0 & d & e \\ 0 & 0 & f \end{bmatrix} \right| a, b, c, d, e, f \in \mathbf{R},\ a, d, f \neq 0 \right\}.$$
It can be shown that G is a group under matrix multiplication (i.e., you do not have to prove this).

   Is G an abelian group? Prove or disprove.
6. (Ch. 3) 6.
7. (Ch. 3) 12.