## MATH 220: MATRICES

## HOMEWORK #7

The homework is due on **October 11**, **2011**, at the beginning of your class. It is to be handed in **stapled** and legible. Please write on the frontpage:

- Your name,
- Your PSU email id,
- MATH 220,
- Your section number.

The problems must be taken from the 4th edition of the textbook. Correct answers without supporting work will receive no credit. The problems which are <u>underlined</u> are worth 10 points each, the remaining problems are worth 5 points each.

**Textbook Problems - Section 2.3:** # 8, 10, **12**, 14, **21**, 28, 36

**Textbook Problems - Section 2.8:** # 7, 8,  $\underline{\bf 18}$ , 20,  $\underline{\bf 22}$ ,  $\underline{\bf 26}$ , 34, 38

For Problem 10 of Section 2.3 and for Problem 38 of Section 2.8 you can use Wolfram Alpha in order to reduce matrices in echelon form. Go on

http://www.wolframalpha.com/

If, for instance, you want to row reduce the matrix

$$\begin{bmatrix}
 1 & 3 & 5 \\
 2 & -4 & 7 \\
 -5 & 8 & -9
 \end{bmatrix}$$

you must type:

RowReduce  $[\{\{1,3,5\},\{2,-4,7\},\{-5,8,-9\}\}]$