Dear students,

All homework should be sent to

klaus@math.uh.edu

and to no other address. Only klaus goes to my math office, PGH 607, the other emails go to PGH 685, which is the office of the Houston J Mathematics.

For all homework, please complete the subject line stating your name and homework number. Something like:

smithHW1

The same holds for the file name. should be like the subject line, like smithHW1.tex If your homework contains files that have been produced with some other software, like graphs, then you should use the export option of SNB and save as a rap file. Only then your homework will contain that file. The graphics will be "wrapped" into your homework file. Thus the extension .rap.

Please use proper SNB. Here are examples of bad SNB:

Let x be the vector  $(x_1,x_2)$ . It should be: Let x be the vector  $(x_1,x_2)$ 

Let T:A $\rightarrow$ B be linear. It should be: Let  $T:A\rightarrow B$  be linear.

Let [a,b] be a closed interval. It should be Let [a,b] be a closed interval.

All math should be in red, that is in math mode.

You should also copy the text of a homework. And not just state the answers.

For most of the problems, you can check your answers using SNB. If you have done so, then you can say that the answer agrees with SNB.

Section 2.3: In exercises 1-3 determine whether the given matrix is in reduced echelon form

1. 
$$\begin{pmatrix} 1 & -1 & 0 & 1 \\ 0 & 1 & 0 & -6 \\ 0 & 0 & 1 & 0 \end{pmatrix}$$
 Answer: No

The second column should be a unit vector. One more operation is needed, namely addition of the second row to the first one.

SNB check: 
$$\begin{pmatrix} 1 & -1 & 0 & 1 \\ 0 & 1 & 0 & -6 \\ 0 & 0 & 1 & 0 \end{pmatrix}$$
, row echelon form:  $\begin{pmatrix} 1 & 0 & 0 & -5 \\ 0 & 1 & 0 & -6 \\ 0 & 0 & 1 & 0 \end{pmatrix}$