Math 2418 Linear Algebra Quiz #4 (OPEN BOOK, OPEN NOTES)
Sept. 20-21, 2001

[10] 1.) Prove by giving a specific counter-example that $det(A+B) \neq detA + detB$.

[10] 2.) Let $A = \begin{bmatrix} 3 & -2 & 1 \\ 5 & 6 & 2 \\ 1 & 0 & -3 \end{bmatrix}$. Suppose $AdjA = \begin{bmatrix} x & -6 & -18 \\ y & -10 & -1 \\ -6 & -2 & 28 \end{bmatrix}$.

Find x, y, and $detA$, and use this information to find A^{-1}.

Answer 2.) $x =$ _____, $y =$ _____, $detA =$ _____, $A^{-1} =$ _____