Name:

Problem 1: Compute the determinant of the following matrix:

$$\begin{pmatrix} 4 & 0 & 1 & 2 \\ 0 & 0 & 1 & 0 \\ 1 & 3 & -1 & 0 \\ 2 & 0 & 0 & 2 \end{pmatrix}$$