

Linear Algebra Quiz 5

Use elementary row operations to compute the determinant $\det A$ of the following matrix:

$$A = \begin{bmatrix} 2 & -1 & 3 & 0 & 6 & 1 \\ 2 & -1 & 3 & 0 & 6 & 6 \\ 4 & -2 & 5 & 1 & 13 & 3 \\ -2 & 1 & -3 & 1 & -6 & -1 \\ -6 & 3 & -9 & 0 & -13 & 2 \\ 2 & 1 & 5 & 2 & 8 & 3 \end{bmatrix}$$