For practice only. Not to be submitted.

1. For each of the following matrices, (i) find the matrix of minors M; (ii) find the matrix of cofactors C; (iii) compute the product AC^T and use it to determine $\det A$; (iv) use these results to find A^{-1}, if it exists.

   (a) $A = \begin{bmatrix} 2 & -5 & -1 \\ -3 & -1 & 0 \\ 2 & 4 & -3 \end{bmatrix}$

   (b) $A = \begin{bmatrix} 4 & -8 \\ -3 & 6 \end{bmatrix}$

2. Find the determinant of each of the following matrices by expanding along an appropriate row (or column).

   (a) $A = \begin{bmatrix} 4 & 0 & 1 \\ -2 & -2 & -5 \\ 9 & 1 & 3 \end{bmatrix}$

   (b) $B = \begin{bmatrix} 1 & -3 & -3 & 4 \\ 0 & 5 & 1 & 0 \\ -1 & 0 & 1 & -1 \\ -4 & 4 & 2 & 1 \end{bmatrix}$

   (c) $C = \begin{bmatrix} -2 & 7 & -1 & -5 \\ 1 & 1 & -2 & 0 \\ 0 & -3 & 4 & 0 \\ 3 & 3 & 2 & 0 \end{bmatrix}$