Determinants

Find the determinant of the 2 by 2 matrix.

1. $A = \begin{bmatrix} -1 & 1 \\ 0 & 1 \end{bmatrix}$

2. $A = \begin{bmatrix} 8 & 6 \\ 7 & -10 \end{bmatrix}$

Find the determinant using cofactor expansion.

1. $A = \begin{bmatrix} -1 & 0 & 1 \\ 2 & -1 & 0 \\ 3 & 4 & 6 \end{bmatrix}$

2. $A = \begin{bmatrix} -1 & 0 & 1 \\ 2 & -1 & 1 \\ 3 & 4 & 7 \end{bmatrix}$

3. $A = \begin{bmatrix} 1 & 0 & 0 & 4 \\ -1 & 2 & 3 & 6 \\ 1 & 0 & 1 & -1 \\ 4 & 4 & 1 & 0 \end{bmatrix}$