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**Homework 4**

Find the determinants of the following matrices.

1.  $A = \begin{pmatrix} -2 & 0 & 1 \\ 3 & 4 & -2 \\ 5 & 3 & -1 \end{pmatrix}$

4.  $D = \begin{pmatrix} 0 & 0 & 3 & -1 \\ 1 & 2 & -1 & 1 \\ -2 & -2 & 3 & -5 \\ 1 & 6 & -8 & -4 \end{pmatrix}$

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

5.  $E = \begin{pmatrix} -1 & 3 & -4 & 2 \\ 0 & -1 & 1 & 3 \\ 3 & 0 & -2 & -1 \\ 2 & -1 & 4 & 3 \end{pmatrix}$

3.  $C = \begin{pmatrix} 1 & 1 & -2 & 1 \\ -1 & 4 & 3 & -2 \\ 0 & 5 & 3 & 0 \\ -2 & 3 & 7 & 1 \end{pmatrix}$

6.  $F = \begin{pmatrix} 0 & 0 & -4 & 0 & 0 \\ 0 & 1 & 3 & -1 & 1 \\ 0 & -2 & -1 & 4 & -3 \\ 2 & -1 & 4 & 3 & 0 \\ -2 & 3 & -9 & -11 & 10 \end{pmatrix}$ 

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