



Inverse of a Matrix



Instructions: For each matrix, calculate the determinant and hence write the inverse. Where there is no inverse, type "none" on the line.

The first one is done for you

1. $A = \begin{pmatrix} 2 & 4 \\ 1 & 3 \end{pmatrix}$ $\text{Det } A = 2$ $A^{-1} = \frac{1}{2} \begin{pmatrix} 3 & -4 \\ -1 & 2 \end{pmatrix}$ $A^{-1} = \underline{\hspace{2cm}}$

2. $B = \begin{pmatrix} 2 & 1 \\ 3 & 2 \end{pmatrix}$ $\text{Det } B =$ $B^{-1} = - \begin{pmatrix} & \\ & \end{pmatrix}$ $B^{-1} = \underline{\hspace{2cm}}$

3. $C = \begin{pmatrix} 6 & 2 \\ 3 & 4 \end{pmatrix}$ $\text{Det } C =$ $C^{-1} = - \begin{pmatrix} & \\ & \end{pmatrix}$ $C^{-1} = \underline{\hspace{2cm}}$

4. $D = \begin{pmatrix} 7 & 2 \\ 14 & 4 \end{pmatrix}$ $\text{Det } D =$ $D^{-1} = - \begin{pmatrix} & \\ & \end{pmatrix}$ $D^{-1} = \underline{\hspace{2cm}}$

5. $E = \begin{pmatrix} 5 & 2 \\ 4 & -3 \end{pmatrix}$ $\text{Det } E =$ $E^{-1} = - \begin{pmatrix} & \\ & \end{pmatrix}$ $E^{-1} = \underline{\hspace{2cm}}$

6. $F = \begin{pmatrix} -9 & -6 \\ -4 & -3 \end{pmatrix}$ $\text{Det } F =$ $F^{-1} = - \begin{pmatrix} & \\ & \end{pmatrix}$ $F^{-1} = \underline{\hspace{2cm}}$

7. $G = \begin{pmatrix} 3 & 4 \\ 6 & 7 \end{pmatrix}$ $\text{Det } G =$ $G^{-1} = - \begin{pmatrix} & \\ & \end{pmatrix}$ $G^{-1} = \underline{\hspace{2cm}}$