

DORIS JOHNSON SENIOR HIGH SCHOOL
MATHEMATICS DEPARTMENT
MATRICES
INVERSE OF A MATRIX

NAME: _____ DATE: _____

INSTRUCTIONS: Calculate the inverse of each inverse below where possible. Type your elements as DECIMALS ONLY. Where there is no inverse, type "none" on the line.

1) $A = \begin{pmatrix} 2 & 4 \\ 1 & 3 \end{pmatrix}$ $A^{-1} = \begin{pmatrix} & \end{pmatrix}$ OR $A^{-1} = \underline{\hspace{2cm}}$

2) $B = \begin{pmatrix} 5 & 10 \\ -1 & 2 \end{pmatrix}$ $B^{-1} = \begin{pmatrix} & \end{pmatrix}$ OR $B^{-1} = \underline{\hspace{2cm}}$

3) $C = \begin{pmatrix} 3 & 2 \\ 2 & 1 \end{pmatrix}$ $C^{-1} = \begin{pmatrix} & \end{pmatrix}$ OR $C^{-1} = \underline{\hspace{2cm}}$

4) $D = \begin{pmatrix} 8 & 2 \\ -1 & 0 \end{pmatrix}$ $D^{-1} = \begin{pmatrix} & \end{pmatrix}$ OR $D^{-1} = \underline{\hspace{2cm}}$

5) $E = \begin{pmatrix} 2 & -8 \\ -1 & 4 \end{pmatrix}$ $E^{-1} = \begin{pmatrix} & \end{pmatrix}$ OR $E^{-1} = \underline{\hspace{2cm}}$

6) $F = \begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix}$ $F^{-1} = \begin{pmatrix} & \end{pmatrix}$ OR $F^{-1} = \underline{\hspace{2cm}}$