**MATRICES** **NAME:** **PER:**

**10.6 #7-14, 22-26**

**10.5 #3,4, 11-16**

**CHECK EVENS FOR 10.5 AND 10.6:**

$\begin{bmatrix}1 & 0\\ 0 & 1\end{bmatrix}$ $\begin{bmatrix}-\frac{5}{3} & -\frac{4}{3}\\ -\frac{8}{3} & -\frac{7}{3}\end{bmatrix}$ $\begin{bmatrix}-9 & 4\\ 7 & -3\end{bmatrix}$ $\begin{bmatrix}1 & 0\\ 0 & 1\end{bmatrix}$ $\begin{bmatrix}12 & -1\\ -15 & \frac{3}{2}\end{bmatrix}$

no determinant because matrix isn't square

-4 0 0 1 2 2.9

**A. Write the identity matrix for a 2x2 and a 3x3 matrix:**

$I = \begin{bmatrix} & \\ & \end{bmatrix}$

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**B. Evaluate:**

$\begin{vmatrix}6 & -3\\ 2 & 3\end{vmatrix}$

**C. Find the determinant of the matrix** $\begin{bmatrix}-9 & 3\\ 2 & -\frac{2}{3}\end{bmatrix}$

**D. Find the inverse of matrix *M***

$M = \begin{bmatrix}6 & -3\\ 2 & 3\end{bmatrix}$ $M^{-1} =$

**E. Find the determinant of matrix *N*.**

$\det(N) = \begin{vmatrix}2 & 3 & -1\\ 0 & 2 & 4\\ -2 & 5 & 6\end{vmatrix} = \begin{vmatrix} & \\ & \end{vmatrix} - \begin{vmatrix} & \\ & \end{vmatrix} + \begin{vmatrix} & \\ & \end{vmatrix}$