

Name _____

Date _____

Finding the Inverse of a Matrix - Matching Worksheet

Write the letter of the answer that matches the problem. Find the inverse of the following matrix.

_____ 1. $\begin{pmatrix} 5 & 8 & 2 \\ 2 & 3 & 0 \\ 1 & 2 & 3 \end{pmatrix}$

a. $\begin{pmatrix} 1/5 & 1/5 & 0 \\ -1/5 & 3/10 & 1 \\ 1/5 & -3/10 & 0 \end{pmatrix}$

_____ 2. $\begin{pmatrix} 2 & 1 & 2 \\ 3 & 1 & 2 \\ 2 & 1 & 0 \end{pmatrix}$

b. $\begin{pmatrix} 1/2 & 0 & -1/2 \\ -3/2 & 0 & 5/2 \\ 5 & 1 & -9 \end{pmatrix}$

_____ 3. $\begin{pmatrix} 5 & 1 & 0 \\ 2 & 4 & 1 \\ 3 & 1 & 0 \end{pmatrix}$

c. $\begin{pmatrix} -1/3 & 1/9 & 5/18 \\ 1/3 & 2/9 & -4/9 \\ 1/3 & -1/9 & 2/9 \end{pmatrix}$

_____ 4. $\begin{pmatrix} 0 & 1 & 2 \\ 4 & 3 & 1 \\ 2 & 0 & 2 \end{pmatrix}$

d. $\begin{pmatrix} -9 & 20 & 6 \\ 6 & -13 & -4 \\ -1 & 2 & 1 \end{pmatrix}$

_____ 5. $\begin{pmatrix} 4 & 4 & 5 \\ 2 & 3 & 1 \\ 1 & 2 & 0 \end{pmatrix}$

e. $\begin{pmatrix} -2 & 10 & -11 \\ 1 & -5 & 6 \\ 1 & -4 & 4 \end{pmatrix}$

_____ 6. $\begin{pmatrix} 3 & 0 & 2 \\ 2 & 0 & -2 \\ 0 & 1 & 1 \end{pmatrix}$

f. $\begin{pmatrix} -1 & 1 & 0 \\ 2 & -2 & 1 \\ 1/2 & 0 & -1/2 \end{pmatrix}$

