Name _____ Date _____

Multiplying Matrices - Matching Worksheet

Write the letter of the answer that matches the problem.

_____ 1. Find the product of two matrices.

$$\begin{bmatrix} 5 & -5 \\ 2 & -8 \\ 6 & -3 \end{bmatrix} \text{ X } \begin{bmatrix} -2 & 5 \\ -4 & 7 \\ -4 & 6 \end{bmatrix}$$

_____ 2. Find the matrix product of C_x.

Matrix c =

$$\begin{bmatrix} -3 & 5 & 7 \\ -3 & 4 & 5 \\ -4 & 8 & 8 \end{bmatrix}$$

Vector x = $\begin{bmatrix} 4 \\ 5 \\ 4 \end{bmatrix}$

_____ 3. Find the product of two matrices.

$$\begin{bmatrix} 4 & -6 \\ 5 & -5 \\ 9 & -4 \end{bmatrix} \text{ X } \begin{bmatrix} -4 & 9 \\ -5 & 6 \\ -6 & 5 \end{bmatrix}$$

_____ 4. Write undefined for expressions that are undefined.

$$\begin{bmatrix} 5 & 6 & 6 \\ 2 & 7 & 2 \\ 6 & -4 & -6 \end{bmatrix} \text{ X } \begin{bmatrix} -7 & 8 & -6 \\ 4 & -6 & 6 \\ 3 & 5 & 2 \end{bmatrix}$$

_____ 5. Find the product of two matrices.

$$\begin{bmatrix} 4 & 5 \\ 2 & 4 \\ 7 & 3 \end{bmatrix} \text{ X } \begin{bmatrix} -1 & 9 \\ -3 & 7 \\ -2 & 6 \end{bmatrix}$$

_____ 6. Write undefined for expressions that are undefined.

$$\begin{bmatrix} 4 & 6 & 4 \\ 3 & 8 & 3 \\ 2 & -5 & -4 \end{bmatrix} \text{ X } \begin{bmatrix} -5 & 2 & -4 \\ 4 & -7 & 6 \\ 6 & 8 & 4 \end{bmatrix}$$

a. $\begin{matrix} -10 & -25 \\ -8 & -56 \\ -24 & -18 \end{matrix}$

b. $\begin{matrix} -16 & -54 \\ -25 & -30 \\ -54 & -20 \end{matrix}$

c. $\begin{matrix} -4 & 45 \\ -6 & 28 \\ -14 & 18 \end{matrix}$

d. $\begin{matrix} -20 & 12 & -16 \\ 12 & -56 & 18 \\ 12 & -40 & -16 \end{matrix}$

e. $\begin{matrix} -12 & 20 & 28 \\ -15 & 20 & 25 \\ -16 & 32 & 32 \end{matrix}$

f. $\begin{matrix} -35 & 48 & -36 \\ 8 & -42 & 12 \\ 18 & -20 & -12 \end{matrix}$