

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Finding Inverse of a Matrix****Find the inverse of each matrix.**

1)  $\begin{vmatrix} -6 & 11 \\ -4 & 7 \end{vmatrix}$

2)  $\begin{vmatrix} 2 & -10 \\ -11 & 8 \end{vmatrix}$

3)  $\begin{vmatrix} -1 & 7 \\ -1 & 7 \end{vmatrix}$

4)  $\begin{vmatrix} 3 & -2 \\ -4 & 6 \end{vmatrix}$

5)  $\begin{vmatrix} -9 & -9 \\ -2 & -2 \end{vmatrix}$

6)  $\begin{vmatrix} -9 & -6 \\ -5 & -4 \end{vmatrix}$

7)  $\begin{vmatrix} 0 & 0 \\ -6 & 4 \end{vmatrix}$

8)  $\begin{vmatrix} 1 & -1 \\ -6 & -3 \end{vmatrix}$

9)  $\begin{vmatrix} -3 & 3 \\ 8 & 7 \end{vmatrix}$

10)  $\begin{vmatrix} -2 & 2 \\ -9 & 8 \end{vmatrix}$



$$1) \begin{vmatrix} -6 & 11 \\ -4 & 7 \end{vmatrix}$$

$$\begin{vmatrix} \frac{7}{2} & -\frac{11}{2} \\ 2 & -3 \end{vmatrix}$$

$$2) \begin{vmatrix} 2 & -10 \\ -11 & 8 \end{vmatrix}$$

$$\begin{vmatrix} -\frac{4}{47} & -\frac{5}{47} \\ -\frac{-2}{94} & -\frac{1}{47} \end{vmatrix}$$

$$3) \begin{vmatrix} -1 & 7 \\ -1 & 7 \end{vmatrix}$$

**No inverse exists**

$$4) \begin{vmatrix} 3 & -2 \\ -4 & 6 \end{vmatrix}$$

$$\begin{vmatrix} \frac{3}{5} & \frac{1}{5} \\ \frac{2}{5} & \frac{3}{10} \end{vmatrix}$$

$$5) \begin{vmatrix} -9 & -9 \\ -2 & -2 \end{vmatrix}$$

**No inverse exists**

$$6) \begin{vmatrix} -9 & -6 \\ -5 & -4 \end{vmatrix}$$

$$\begin{vmatrix} -\frac{2}{3} & 1 \\ \frac{5}{6} & -\frac{3}{2} \end{vmatrix}$$

$$7) \begin{vmatrix} 0 & 0 \\ -6 & 4 \end{vmatrix}$$

**No inverse exists**

$$8) \begin{vmatrix} 1 & -1 \\ -6 & -3 \end{vmatrix}$$

$$\begin{vmatrix} \frac{1}{3} & -\frac{1}{9} \\ -\frac{2}{3} & -\frac{1}{9} \end{vmatrix}$$

$$9) \begin{vmatrix} -3 & 3 \\ 8 & 7 \end{vmatrix}$$

$$\begin{vmatrix} -\frac{7}{45} & \frac{1}{15} \\ \frac{8}{45} & \frac{1}{15} \end{vmatrix}$$

$$10) \begin{vmatrix} -2 & 2 \\ -9 & 8 \end{vmatrix}$$

$$\begin{vmatrix} 4 & -1 \\ \frac{9}{2} & -1 \end{vmatrix}$$