

# Matrices

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

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

## Inverse of 3x3 Matrices.

1) 
$$\begin{bmatrix} 9 & 6 & 3 \\ 4 & 7 & 8 \\ 9 & 2 & 1 \end{bmatrix}$$

\_\_\_\_\_

2) 
$$\begin{bmatrix} 9 & 2 & 4 \\ 7 & 1 & 0 \\ 11 & 2 & 5 \end{bmatrix}$$

\_\_\_\_\_

3) 
$$\begin{bmatrix} 12 & 4 & 8 \\ 9 & 3 & 7 \\ 2 & 11 & 5 \end{bmatrix}$$

\_\_\_\_\_

4) 
$$\begin{bmatrix} 13 & 9 & 3 \\ 2 & 11 & 8 \\ 10 & 5 & 8 \end{bmatrix}$$

\_\_\_\_\_

5) 
$$\begin{bmatrix} 14 & 8 & 2 \\ 7 & 9 & 12 \\ 8 & 9 & 5 \end{bmatrix}$$

\_\_\_\_\_

6) 
$$\begin{bmatrix} 1 & 6 & 7 \\ 3 & 4 & 9 \\ 8 & 9 & 4 \end{bmatrix}$$

\_\_\_\_\_

7) 
$$\begin{bmatrix} 10 & 12 & 9 \\ 5 & 7 & 8 \\ 2 & 3 & 7 \end{bmatrix}$$

\_\_\_\_\_

8) 
$$\begin{bmatrix} 7 & 0 & 9 \\ 2 & 11 & 8 \\ 2 & 8 & 13 \end{bmatrix}$$

\_\_\_\_\_

9) 
$$\begin{bmatrix} 14 & 8 & 9 \\ 2 & 4 & 3 \\ 4 & 11 & 10 \end{bmatrix}$$

\_\_\_\_\_

# Matrices

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

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

## Inverse of 3x3 Matrices.

1) 
$$\begin{bmatrix} 9 & 6 & 3 \\ 4 & 7 & 8 \\ 9 & 2 & 1 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{-1}{18} & 0 & \frac{1}{6} \\ \frac{34}{81} & \frac{-1}{9} & \frac{-10}{27} \\ \frac{-55}{162} & \frac{2}{9} & \frac{13}{54} \end{bmatrix}$$

2) 
$$\begin{bmatrix} 9 & 2 & 4 \\ 7 & 1 & 0 \\ 11 & 2 & 5 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{-5}{13} & \frac{2}{13} & \frac{4}{13} \\ \frac{35}{13} & \frac{-1}{13} & \frac{-28}{13} \\ \frac{13}{13} & \frac{13}{13} & \frac{13}{13} \\ \frac{-3}{13} & \frac{-4}{13} & \frac{5}{13} \end{bmatrix}$$

3) 
$$\begin{bmatrix} 12 & 4 & 8 \\ 9 & 3 & 7 \\ 2 & 11 & 5 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{1}{2} & \frac{-17}{31} & \frac{-1}{31} \\ \frac{1}{4} & \frac{-11}{31} & \frac{3}{31} \\ \frac{-3}{4} & 1 & 0 \end{bmatrix}$$

4) 
$$\begin{bmatrix} 13 & 9 & 3 \\ 2 & 11 & 8 \\ 10 & 5 & 8 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{4}{75} & \frac{-19}{300} & \frac{13}{300} \\ \frac{16}{225} & \frac{37}{450} & \frac{-49}{450} \\ \frac{-1}{9} & \frac{1}{36} & \frac{5}{36} \end{bmatrix}$$

5) 
$$\begin{bmatrix} 14 & 8 & 2 \\ 7 & 9 & 12 \\ 8 & 9 & 5 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{63}{412} & \frac{11}{206} & \frac{-39}{206} \\ \frac{-61}{412} & \frac{-27}{206} & \frac{77}{206} \\ \frac{9}{412} & \frac{31}{206} & \frac{-35}{206} \end{bmatrix}$$

6) 
$$\begin{bmatrix} 1 & 6 & 7 \\ 3 & 4 & 9 \\ 8 & 9 & 4 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{-1}{4} & \frac{3}{20} & \frac{1}{10} \\ \frac{3}{13} & \frac{-1}{5} & \frac{3}{65} \\ \frac{-1}{52} & \frac{3}{20} & \frac{-7}{130} \end{bmatrix}$$

7) 
$$\begin{bmatrix} 10 & 12 & 9 \\ 5 & 7 & 8 \\ 2 & 3 & 7 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{25}{31} & \frac{-57}{31} & \frac{33}{31} \\ \frac{-19}{31} & \frac{52}{31} & \frac{-35}{31} \\ \frac{1}{31} & \frac{-6}{31} & \frac{10}{31} \end{bmatrix}$$

8) 
$$\begin{bmatrix} 7 & 0 & 9 \\ 2 & 11 & 8 \\ 2 & 8 & 13 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{79}{499} & \frac{72}{499} & \frac{-99}{499} \\ \frac{-10}{499} & \frac{73}{499} & \frac{-38}{499} \\ \frac{-6}{499} & \frac{-56}{499} & \frac{77}{499} \end{bmatrix}$$

9) 
$$\begin{bmatrix} 14 & 8 & 9 \\ 2 & 4 & 3 \\ 4 & 11 & 10 \end{bmatrix}$$

---


$$\begin{bmatrix} \frac{7}{88} & \frac{19}{88} & \frac{-3}{22} \\ \frac{-1}{11} & \frac{13}{11} & \frac{-3}{11} \\ \frac{3}{44} & \frac{-61}{44} & \frac{5}{11} \end{bmatrix}$$