

# Matrices

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

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

**Find whether inverse does exist for the given matrices:**

1) 
$$\begin{bmatrix} 8 & 2 \\ 6 & 1 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

2) 
$$\begin{bmatrix} 7 & 2 \\ 14 & 4 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

3) 
$$\begin{bmatrix} -9 & -6 \\ -3 & -2 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

4) 
$$\begin{bmatrix} 6 & -2 \\ -2 & 5 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

5) 
$$\begin{bmatrix} 8 & 4 \\ -4 & -2 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

6) 
$$\begin{bmatrix} 9 & -3 \\ 2 & -5 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

7) 
$$\begin{bmatrix} -5 & -2 \\ 2 & 1 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

8) 
$$\begin{bmatrix} -10 & -5 \\ 2 & 1 \end{bmatrix}$$

$\Delta =$  \_\_\_\_\_

Conclusion: \_\_\_\_\_

# Matrices

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

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

**Find whether inverse does exist for the given matrices:**

1) 
$$\begin{bmatrix} 8 & 2 \\ 6 & 1 \end{bmatrix}$$

$\Delta = -4 \neq 0$  \_\_\_\_\_

Conclusion: Inverse Exist

2) 
$$\begin{bmatrix} 7 & 2 \\ 14 & 4 \end{bmatrix}$$

$\Delta = 0$  \_\_\_\_\_

Conclusion: Inverse Does Not Exist

3) 
$$\begin{bmatrix} -9 & -6 \\ -3 & -2 \end{bmatrix}$$

$\Delta = 0$  \_\_\_\_\_

Conclusion: Inverse Does Not Exist

4) 
$$\begin{bmatrix} 6 & -2 \\ -2 & 5 \end{bmatrix}$$

$\Delta = 26 \neq 0$  \_\_\_\_\_

Conclusion: Inverse Exist

5) 
$$\begin{bmatrix} 8 & 4 \\ -4 & -2 \end{bmatrix}$$

$\Delta = 0$  \_\_\_\_\_

Conclusion: Inverse Does Not Exist

6) 
$$\begin{bmatrix} 9 & -3 \\ 2 & -5 \end{bmatrix}$$

$\Delta = -39 \neq 0$  \_\_\_\_\_

Conclusion: Inverse Exist

7) 
$$\begin{bmatrix} -5 & -2 \\ 2 & 1 \end{bmatrix}$$

$\Delta = -1 \neq 0$  \_\_\_\_\_

Conclusion: Inverse Exist

8) 
$$\begin{bmatrix} -10 & -5 \\ 2 & 1 \end{bmatrix}$$

$\Delta = 0$  \_\_\_\_\_

Conclusion: Inverse Does Not Exist