# Matrices

Name:_____ Date:_____

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

1) $\begin{bmatrix} -4 & 3 \\ 8 & 2 \end{bmatrix}$

Δ = _____

Conclusion: _____

2) $\begin{bmatrix} 6 & -1 \\ 2 & -3 \end{bmatrix}$

Δ = _____

Conclusion: _____

3) $\begin{bmatrix} 8 & 16 \\ 2 & 4 \end{bmatrix}$

Δ = _____

Conclusion: _____

4) $\begin{bmatrix} 6 & 3 \\ 10 & 5 \end{bmatrix}$

Δ = _____

Conclusion: _____

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

Δ = _____

Conclusion: _____

6) $\begin{bmatrix} 9 & -18 \\ 4 & -8 \end{bmatrix}$

Δ = _____

Conclusion: _____

7) $\begin{bmatrix} 15 & 5 \\ 12 & 4 \end{bmatrix}$

Δ = _____

Conclusion: _____

8) $\begin{bmatrix} 9 & 5 \\ 4 & 3 \end{bmatrix}$

Δ = _____

Conclusion: _____

# Matrices

Name:_____ Date:_____

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

1) $\begin{bmatrix} -4 & 3 \\ 8 & 2 \end{bmatrix}$

$\Delta =$ -32≠0

Conclusion: Inverse Exist

2) $\begin{bmatrix} 6 & -1 \\ 2 & -3 \end{bmatrix}$

$\Delta =$ -16≠0

Conclusion: Inverse Exist

3) $\begin{bmatrix} 8 & 16 \\ 2 & 4 \end{bmatrix}$

$\Delta =$ 0

Conclusion: Inverse Does Not Exist

4) $\begin{bmatrix} 6 & 3 \\ 10 & 5 \end{bmatrix}$

$\Delta =$ 0

Conclusion: Inverse Does Not Exist

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

$\Delta =$ 6≠0

Conclusion: Inverse Exist

6) $\begin{bmatrix} 9 & -18 \\ 4 & -8 \end{bmatrix}$

$\Delta =$ 0

Conclusion: Inverse Does Not Exist

7) $\begin{bmatrix} 15 & 5 \\ 12 & 4 \end{bmatrix}$

$\Delta =$ 0

Conclusion: Inverse Does Not Exist

8) $\begin{bmatrix} 9 & 5 \\ 4 & 3 \end{bmatrix}$

$\Delta =$ 7≠0

Conclusion: Inverse Exist