Matrices

Name:_____ Date:_____

Find whether inverse does exist for the given matrices:

1) $\begin{bmatrix} 14 & 7 \\ 8 & 4 \end{bmatrix}$

Δ = _____

Conclusion: _____

2) $\begin{bmatrix} 3 & 3 \\ 10 & 12 \end{bmatrix}$

Δ = _____

Conclusion: _____

3) $\begin{bmatrix} -11 & 5 \\ -9 & 5 \end{bmatrix}$

Δ = _____

Conclusion: _____

4) $\begin{bmatrix} -4 & 2 \\ -10 & 5 \end{bmatrix}$

Δ = _____

Conclusion: _____

5) $\begin{bmatrix} 6 & 12 \\ -7 & -14 \end{bmatrix}$

Δ = _____

Conclusion: _____

6) $\begin{bmatrix} 15 & 18 \\ 5 & 5 \end{bmatrix}$

Δ = _____

Conclusion: _____

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

Δ = _____

Conclusion: _____

8) $\begin{bmatrix} -16 & 8 \\ -12 & 6 \end{bmatrix}$

Δ = _____

Conclusion: _____

Matrices

Name:_____ Date:_____

Find whether inverse does exist for the given matrices:

1) $\begin{bmatrix} 14 & 7 \\ 8 & 4 \end{bmatrix}$

Δ = 0

Conclusion: Inverse Does Not Exist

2) $\begin{bmatrix} 3 & 3 \\ 10 & 12 \end{bmatrix}$

Δ = 6≠0

Conclusion: Inverse Exist

3) $\begin{bmatrix} -11 & 5 \\ -9 & 5 \end{bmatrix}$

Δ = -10≠0

Conclusion: Inverse Exist

4) $\begin{bmatrix} -4 & 2 \\ -10 & 5 \end{bmatrix}$

Δ = 0

Conclusion: Inverse Does Not Exist

5) $\begin{bmatrix} 6 & 12 \\ -7 & -14 \end{bmatrix}$

Δ = 0

Conclusion: Inverse Does Not Exist

6) $\begin{bmatrix} 15 & 18 \\ 5 & 5 \end{bmatrix}$

Δ = -15≠0

Conclusion: Inverse Exist

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

Δ = 40≠0

Conclusion: Inverse Exist

8) $\begin{bmatrix} -16 & 8 \\ -12 & 6 \end{bmatrix}$

Δ = 0

Conclusion: Inverse Does Not Exist