

Precalculus

9.3 Odd Answers

1. $\begin{bmatrix} -4 & 4 & -5 \\ -1 & 5 & 4 \end{bmatrix}$

3. $\begin{bmatrix} -8 & 7 & -15 \\ 7 & 0 & 22 \end{bmatrix}$

5. $\begin{bmatrix} 1 & 14 & -14 \\ 2 & 22 & -18 \\ 3 & 0 & 28 \end{bmatrix}$

7. $\begin{bmatrix} 14 & 7 & -2 \\ 20 & 12 & -4 \\ -14 & 7 & -6 \end{bmatrix}$

9. $\begin{bmatrix} -22 & 29 & 8 & -1 \\ -10 & 17 & 6 & -1 \end{bmatrix}$

11. $\begin{bmatrix} 1 & -1 \\ -1 & 2 \end{bmatrix}$

13. $\begin{bmatrix} 1 & -\frac{1}{a} \\ -1 & \frac{2}{a} \end{bmatrix}$

15. (3,2)

17. (2,-1)

19. (-2,3,5)

21. When doing row reduction on $\left[\begin{array}{cc|cc} -3 & \frac{1}{2} & 1 & 0 \\ 6 & -1 & 0 & 1 \end{array} \right]$, you end up with $\left[\begin{array}{cc|cc} 1 & -\frac{1}{6} & 0 & \frac{1}{6} \\ 0 & 0 & 1 & 0 \end{array} \right]$. It is impossible

to get a 0 and a 1 to the left of the bar in row 2. The two zeros to the left of the bar in row 2 mean the matrix has no inverse. (Any time you end up with a row with all zeros on the left of the bar, the matrix has no inverse).