

Answer Key

Chapter 4

Lesson 4.4

Practice C

1. $\begin{bmatrix} \frac{8}{13} & -\frac{3}{13} \\ -\frac{1}{13} & \frac{2}{13} \end{bmatrix}$ 2. $\begin{bmatrix} -\frac{4}{7} & \frac{3}{14} \\ \frac{1}{7} & \frac{1}{14} \end{bmatrix}$

3. The matrix does not have an inverse.

4. $\begin{bmatrix} -0.2 & 0.12 & 0.32 \\ 0.4 & -0.44 & 0.16 \\ 0.2 & 0.08 & -0.12 \end{bmatrix}$

5. $\begin{bmatrix} 0.8125 & -0.1875 & -0.875 \\ -1.375 & 0.625 & 1.25 \\ 0.75 & -0.25 & -0.5 \end{bmatrix}$

6. $\begin{bmatrix} 0.2 & -0.1 & 0.6 \\ 0.2 & -0.1 & 0.1 \\ -0.2 & 0.6 & -0.6 \end{bmatrix}$

7. $\begin{bmatrix} 5 & -3 & 8.5 \\ -6 & 4 & -11 \end{bmatrix}$

8. $\begin{bmatrix} -1 & 3 & -5 & 15 \\ 5 & -2 & 8 & -22 \end{bmatrix}$ 9. $\begin{bmatrix} -11 & -10 \\ 4 & 3 \end{bmatrix}$

10. $\begin{bmatrix} -10 \\ 12 \\ 4 \end{bmatrix}$ 11. $\begin{bmatrix} -6 & 9 & -11 \\ -5 & 8 & -10 \end{bmatrix}$

12. $\begin{bmatrix} 15.5 & 20.5 & -7.\bar{3} \\ -4.5 & -6.5 & 2.\bar{6} \\ -3.5 & -4.5 & 3 \end{bmatrix}$ 13. $(A^{-1})^{-1} = A$

14. $(AB)^{-1} = B^{-1} \cdot A^{-1}$

15. LIVE LONG AND PROSPER