

# Answers Applications GE

1.

$$A^{-1} = \begin{bmatrix} -2 & 1 \\ \frac{3}{2} & \frac{-1}{2} \end{bmatrix}$$

2.

$$B^{-1} = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$$

3.

$$C^{-1} = \begin{bmatrix} \frac{-3}{5} & \frac{2}{5} & \frac{2}{5} \\ \frac{-12}{5} & \frac{8}{5} & \frac{3}{5} \\ \frac{4}{5} & \frac{-1}{5} & \frac{-1}{5} \end{bmatrix}$$

4.

$$D^{-1} = \begin{bmatrix} \frac{1}{3} & \frac{-1}{3} & \frac{1}{3} \\ \frac{1}{3} & \frac{2}{3} & \frac{-2}{3} \\ \frac{-1}{3} & \frac{1}{3} & \frac{2}{3} \end{bmatrix}$$

5.

$$E^{-1} = \begin{bmatrix} -1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 2 & 0 & 0 & -1 \end{bmatrix}$$

6.

$$F^{-1} = \begin{bmatrix} \frac{4}{11} & \frac{3}{11} & \frac{-2}{11} & \frac{1}{11} \\ \frac{-3}{11} & \frac{6}{11} & \frac{-4}{11} & \frac{2}{11} \\ \frac{2}{11} & \frac{-4}{11} & \frac{10}{11} & \frac{-5}{11} \\ \frac{-1}{11} & \frac{2}{11} & \frac{-5}{11} & \frac{8}{11} \end{bmatrix}$$

7.

$$X = \begin{bmatrix} \frac{7}{9} \\ \frac{19}{9} \end{bmatrix}$$

8.

$$X = \begin{bmatrix} \frac{-12}{5} \\ \frac{8}{5} \\ \frac{34}{5} \end{bmatrix}$$

9.

$$X = \begin{bmatrix} \frac{31}{26} \\ \frac{-3}{13} \\ \frac{35}{26} \end{bmatrix}$$

10.

$$X = \begin{bmatrix} \frac{-7}{11} \\ \frac{-12}{11} \\ \frac{38}{11} \\ \frac{36}{11} \end{bmatrix}$$

11.

$$X = \begin{bmatrix} \frac{309}{155} \\ \frac{58}{155} \\ \frac{7}{31} \\ \frac{18}{31} \end{bmatrix}$$

12.

$$X = \begin{bmatrix} \frac{19}{7} \\ \frac{8}{7} \end{bmatrix}$$

1 + 1

[1] 2