

Exercises

Solve the following homogenous system:

$$x_1 + 3x_2 + 2x_3 = 0$$

$$x_1 + 2x_2 + 3x_3 = 0$$

$$2x_1 + x_2 - 2x_3 = 0$$

Exercises

Solve the following homogenous system:

$$\begin{aligned}3x_1 + 5x_2 - 4x_3 &= 0 \\-3x_1 - 2x_2 + 4x_3 &= 0 \\6x_1 + x_2 - 8x_3 &= 0\end{aligned}$$

Exercises

Solve:

$$x_1 + 2x_2 + 3x_3 = 9$$

$$2x_1 - x_2 + x_3 = 8$$

$$3x_1 - x_3 = 3$$

Exercises

Find the inverse of $A = \begin{bmatrix} 1 & -2 & -4 \\ 2 & -3 & -6 \\ -3 & 6 & 15 \end{bmatrix}$

Exercises

Find the inverse of $B = \begin{bmatrix} 1 & 1 & 5 \\ 1 & 2 & 7 \\ 2 & -1 & 4 \end{bmatrix}$

Exercises

Solve the system $A\mathbf{x} = \mathbf{b}$, where $A = \begin{bmatrix} 1 & -2 & -4 \\ 2 & -3 & -6 \\ -3 & 6 & 15 \end{bmatrix}$ and $\mathbf{b} = \begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$