

Overview of problems



Example Set: A

Write the linear system as a matrix equation

$$\begin{cases} 4x - y = 12 \\ 3x + y = 2 \end{cases}$$

$$\begin{cases} 2x + 7y = 1 \\ 4x - 2y = 18 \end{cases}$$



Example Set: B

Solve the system using the inverse matrices

$$\begin{cases} 4x - y = 12 \\ 3x + y = 2 \end{cases}$$

$$\begin{cases} 2x + 7y = 1 \\ 4x - 2y = 18 \end{cases}$$

Overview of problems- KEY



Example Set: A

Write the linear system as a matrix equation

$$\begin{cases} 4x - y = 12 \\ 3x + y = 2 \end{cases}$$

$$\begin{bmatrix} 4 & -1 \\ 3 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 12 \\ 2 \end{bmatrix}$$

$$\begin{cases} 2x + 7y = 1 \\ 4x - 2y = 18 \end{cases}$$

$$\begin{bmatrix} 2 & 7 \\ 4 & -2 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 1 \\ 18 \end{bmatrix}$$



Example Set: B

Solve the system using the inverse matrices

$$\begin{cases} 4x - y = 12 \\ 3x + y = 2 \end{cases}$$

$$(2, -4)$$

$$\begin{cases} 2x + 7y = 1 \\ 4x - 2y = 18 \end{cases}$$

$$(4, -1)$$