Find the inverses of the following matrices (if they exist).

[a] $\begin{bmatrix} 5 & 11 \\ 7 & 17 \end{bmatrix}$

[b] $\begin{bmatrix} 10 & -35 \\ 6 & -21 \end{bmatrix}$

[c] $\begin{bmatrix} 1 & -1 & 0 \\ 1 & 0 & -1 \\ 6 & -2 & -3 \end{bmatrix}$

[d] $\begin{bmatrix} 3 & -7 & 5 \\ -1 & 0 & 4 \end{bmatrix}$

[e] $\begin{bmatrix} 1 & 2 & 1 \\ 2 & 5 & 5 \\ -3 & -5 & 1 \end{bmatrix}$

[f] $\begin{bmatrix} 4 & 2 \\ -5 & 1 \\ 0 & 8 \end{bmatrix}$

Use inverse matrices to solve the following systems.

[a] $\begin{aligned} 4x + 7y &= 12 \\ 5x + 8y &= -6 \end{aligned}$

[b] $\begin{aligned} 7x + 11y &= 3 \\ 5x + 7y &= 1 \end{aligned}$