Find the inverse of

$$\begin{bmatrix} 1 & 1 \\ -2 & -3 \end{bmatrix}$$

For the system -x - 4y = 2 and -4x + 3y = 27, use Cramer's rule to find y.

Find the inverse of

$$\begin{bmatrix} 1 & 4 \\ -2 & -7 \end{bmatrix}$$

For the system 3x + 4y = -4 and -4x + 3y = 22, use Cramer's rule to find x.

Find the inverse of

$$\begin{bmatrix} 4 & 3 \\ 1 & 1 \end{bmatrix}$$

For the system -x - 2y = 4 and 3x + 3y = -6, use Cramer's rule to find x.

Find the inverse of

$$\begin{bmatrix} 3 & -1 \\ 1 & 0 \end{bmatrix}$$

For the system -2x - 3y = 21 and -x + y = -2, find Dx (replace the x-column with the constants).

Inverse Matrices & Cramer's Rule · 2

ANSWER

$$y = 1$$

Inverse Matrices & Cramer's Rule · 1

ANSWER

$$\begin{bmatrix} 3 & 1 \\ -2 & -1 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 4

ANSWER

$$x = -4$$

Inverse Matrices & Cramer's Rule · 3

ANSWER

$$\begin{bmatrix} -7 & -4 \\ 2 & 1 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 6

ANSWER

$$x = 0$$

Inverse Matrices & Cramer's Rule · 5

ANSWER

$$\begin{bmatrix} 1 & -3 \\ -1 & 4 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 8

ANSWER

$$15$$

Inverse Matrices & Cramer's Rule · 7

ANSWER

$$\begin{bmatrix} 0 & 1 \\ -1 & 3 \end{bmatrix}$$

Find the inverse of

$$\begin{bmatrix} -3 & 4 \\ -1 & 1 \end{bmatrix}$$

For the system -2x - y = -3 and 3x + 5y = -6, use Cramer's rule to find y.

Find the inverse of

$$\begin{bmatrix} -2 & -3 \\ -5 & -7 \end{bmatrix}$$

For the system 5x + 3y = 45 and -2x + y = -7, use Cramer's rule to find x.

Find the inverse of

$$\begin{bmatrix} -1 & 3 \\ -1 & 2 \end{bmatrix}$$

For the system x - 4y = 7 and -5x + 3y = -18, find the determinant D of the coefficient matrix.

Find the inverse of

$$\begin{bmatrix} -3 & -2 \\ -2 & -1 \end{bmatrix}$$

For the system 4x - y = -14 and 2x + 2y = 8, find Dy (replace the y-column with the constants).

Inverse Matrices & Cramer's Rule · 10

ANSWER

$$y = -3$$

Inverse Matrices & Cramer's Rule · 9

ANSWER

$$\begin{bmatrix} 1 & -4 \\ 1 & -3 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 12

ANSWER

$$x = 6$$

Inverse Matrices & Cramer's Rule · 11

ANSWER

$$\begin{bmatrix} 7 & -3 \\ -5 & 2 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 14

ANSWER

$$-17$$

Inverse Matrices & Cramer's Rule · 13

ANSWER

$$\begin{bmatrix} 2 & -3 \\ 1 & -1 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 16

ANSWER

$$60$$

Inverse Matrices & Cramer's Rule · 15

ANSWER

$$\begin{bmatrix} 1 & -2 \\ -2 & 3 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 17

Find the inverse of

$$\begin{bmatrix} 6 & 1 \\ -5 & -1 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 18

For the system -4x + 5y = 14 and 2x - 2y = -6, use Cramer's rule to find x.

Inverse Matrices & Cramer's Rule · 19

Find the inverse of

$$\begin{bmatrix} -1 & -1 \\ 1 & 0 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 20

Find k so that

$$\begin{bmatrix} k & -4 \\ -4 & 2 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 21

Find the inverse of

$$\begin{bmatrix} 2 & 1 \\ 1 & 0 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 22

For the system 4x - 2y = 6 and 2x + 5y = 33, find the determinant D of the coefficient matrix.

Inverse Matrices & Cramer's Rule · 23

Find the inverse of

$$\begin{bmatrix} -1 & -2 \\ 3 & 7 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 24

Find k so that

$$\begin{bmatrix} k & -6 \\ 6 & 1 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 18

ANSWER

$$x = -1$$

Inverse Matrices & Cramer's Rule · 17

ANSWER

$$\begin{bmatrix} 1 & 1 \\ -5 & -6 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 20

ANSWER

$$k = 8$$

Inverse Matrices & Cramer's Rule · 19

ANSWER

$$\begin{bmatrix} 0 & 1 \\ -1 & -1 \end{bmatrix}$$

Inverse Matrices & Cramer's Rule · 22

ANSWER

$$24$$

Inverse Matrices & Cramer's Rule · 21

ANSWER

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

Inverse Matrices & Cramer's Rule · 24

ANSWER

$$k = -36$$

Inverse Matrices & Cramer's Rule · 23

ANSWER

$$\begin{bmatrix} -7 & -2 \\ 3 & 1 \end{bmatrix}$$