Name:

Date:

Matrix Equations

Solve each equation.

1) $\begin{vmatrix} 2 & -3 \\ -5 & 5 \end{vmatrix} Z = \begin{vmatrix} -1 \\ 20 \end{vmatrix}$

2) $\begin{vmatrix} -10 \\ 4 \\ 3 \end{vmatrix} = y - \begin{vmatrix} 7 \\ -5 \\ -11 \end{vmatrix}$

3) $\begin{vmatrix} -5 \\ 5 \\ -20 \end{vmatrix} = 5\,B$

4) $3x = \begin{vmatrix} 12 & -12 \\ 21 & -27 \end{vmatrix}$

5) $\begin{vmatrix} -1 & 2 \\ -6 & 10 \end{vmatrix} z = \begin{vmatrix} 6 \\ 22 \end{vmatrix}$

6) $-4\,b - \begin{vmatrix} 5 \\ 2 \\ -6 \end{vmatrix} = \begin{vmatrix} -33 \\ -2 \\ -22 \end{vmatrix}$

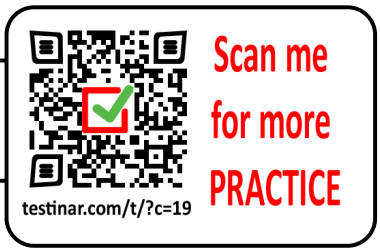
7) $\begin{vmatrix} -1 & -9 \\ 0 & -1 \end{vmatrix} c = \begin{vmatrix} 11 \\ 2 \end{vmatrix}$

8) $\begin{vmatrix} 20 & -3 \\ 15 & -3 \end{vmatrix} = \begin{vmatrix} -6 & -5 \\ -5 & -4 \end{vmatrix} x$

9) $Y - \begin{vmatrix} -1 \\ -5 \\ 8 \\ 8 \end{vmatrix} = \begin{vmatrix} -6 \\ 6 \\ -16 \\ 0 \end{vmatrix}$

10) $\begin{vmatrix} -1 & -2 \\ 2 & 9 \end{vmatrix} B = \begin{vmatrix} -3 & -5 & 13 \\ 21 & 0 & -36 \end{vmatrix}$

Answer Key - www.testinar.com



1) $\begin{vmatrix} 2 & -3 \\ -5 & 5 \end{vmatrix} Z = \begin{vmatrix} -1 \\ 20 \end{vmatrix}$

$\begin{vmatrix} -11 \\ -7 \end{vmatrix}$

2) $\begin{vmatrix} -10 \\ 4 \\ 3 \end{vmatrix} = y - \begin{vmatrix} 7 \\ -5 \\ -11 \end{vmatrix}$

$\begin{vmatrix} -3 \\ -1 \\ -8 \end{vmatrix}$

3) $\begin{vmatrix} -5 \\ 5 \\ -20 \end{vmatrix} = 5\,B$

$\begin{vmatrix} -1 \\ 1 \\ -4 \end{vmatrix}$

4) $3x = \begin{vmatrix} 12 & -12 \\ 21 & -27 \end{vmatrix}$

$\begin{vmatrix} 4 & -4 \\ 7 & -9 \end{vmatrix}$

5) $\begin{vmatrix} -1 & 2 \\ -6 & 10 \end{vmatrix} z = \begin{vmatrix} 6 \\ 22 \end{vmatrix}$

$\begin{vmatrix} 8 \\ 7 \end{vmatrix}$

6) $-4\,b - \begin{vmatrix} 5 \\ 2 \\ -6 \end{vmatrix} = \begin{vmatrix} -33 \\ -2 \\ -22 \end{vmatrix}$

$\begin{vmatrix} 7 \\ 0 \\ 7 \end{vmatrix}$

7) $\begin{vmatrix} -1 & -9 \\ 0 & -1 \end{vmatrix} c = \begin{vmatrix} 11 \\ 2 \end{vmatrix}$

$\begin{vmatrix} 7 \\ -2 \end{vmatrix}$

8) $\begin{vmatrix} 20 & -3 \\ 15 & -3 \end{vmatrix} = \begin{vmatrix} -6 & -5 \\ -5 & -4 \end{vmatrix} x$

$\begin{vmatrix} 5 & 3 \\ -10 & -3 \end{vmatrix}$

9) $Y - \begin{vmatrix} -1 \\ -5 \\ 8 \\ 8 \end{vmatrix} = \begin{vmatrix} -6 \\ 6 \\ -16 \\ 0 \end{vmatrix}$

$\begin{vmatrix} -7 \\ 1 \\ -8 \end{vmatrix}$

10) $\begin{vmatrix} -1 & -2 \\ 2 & 9 \end{vmatrix} B = \begin{vmatrix} -3 & -5 & 13 \\ 21 & 0 & -36 \end{vmatrix}$

$\begin{vmatrix} -3 & 9 & -9 \\ 3 & -2 & -2 \end{vmatrix}$