

15.5a Determinates

Evaluate the determinant of each matrix.

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

2) $\begin{bmatrix} -3 & -4 \\ 2 & 5 \end{bmatrix}$

3) $\begin{bmatrix} -4 & -5 \\ -1 & 1 \end{bmatrix}$

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

Evaluate each determinant.

5) $\begin{vmatrix} -1 & 1 \\ -2 & -1 \end{vmatrix}$

6) $\begin{vmatrix} 5 & 3 \\ 3 & 1 \end{vmatrix}$

7) $\begin{vmatrix} 3 & -3 \\ -4 & -1 \end{vmatrix}$

8) $\begin{vmatrix} 4 & -3 \\ -2 & -2 \end{vmatrix}$

9) $\begin{vmatrix} 0 & 2 \\ -3 & 4 \end{vmatrix}$

10) $\begin{vmatrix} 1 & -2 \\ -3 & -3 \end{vmatrix}$

11) $\begin{vmatrix} 0 & 1 \\ -3 & -1 \end{vmatrix}$

12) $\begin{vmatrix} -3 & 2 \\ 4 & -3 \end{vmatrix}$

13) Evaluate:

$$\begin{vmatrix} 1 & 2 \\ 3 & 4 \end{vmatrix} + \begin{vmatrix} 5 & 2 \\ -2 & 6 \end{vmatrix}$$

14) Give me an example of a 2×2 matrix whose determinate is 13.