Name

Calculate minors of a 3 by 3 matrix

1 Which shows column 2 of the matrix of minors of this matrix? Fill only that column and leave the other entries blank.

A

$$\begin{bmatrix} \square & -11 & \square \\ \square & 0 & \square \\ \square & 4 & \square \end{bmatrix}$$

B

$$\begin{bmatrix} \square & -10 & \square \\ \square & -2 & \square \\ \square & 1 & \square \end{bmatrix}$$

C

$$\begin{bmatrix} \square & -10 & \square \\ \square & -3 & \square \\ \square & 2 & \square \end{bmatrix}$$

D

$$\begin{bmatrix} \square & -10 & \square \\ \square & -2 & \square \\ \square & -2 & \square \end{bmatrix}$$

2 Which is the minor matrix for the entry at row 2, column 2?

A

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

B

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

C

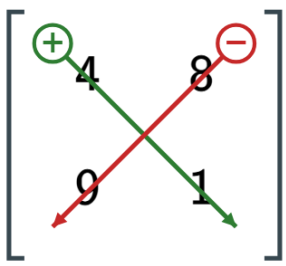
$$\begin{bmatrix} 0 & 5 \\ 2 & -7 \end{bmatrix}$$

3 What is the determinant of the minor matrix for the entry at row 1, column 1?

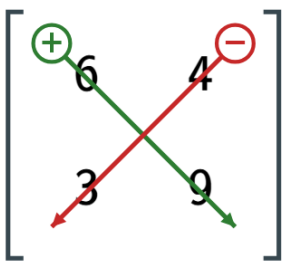
A	B	C
-4	-8	-6
D	**E**	**F**
-14	-5	-12

4 Which diagram correctly finds the determinant of the minor matrix for the entry at row 1, column 3? Green is added, red is subtracted.

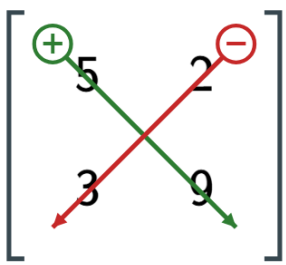
A



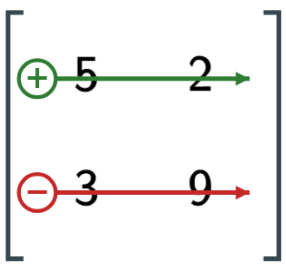
B



C



D



5 Which is the minor matrix for the entry at row 1, column 2?

A

$$[3]$$

B

$$[6]$$

C

$$[2]$$

6 What is the determinant of the minor matrix for the entry at row 2, column 2?

A	B	C
-5	-6	-10
D	**E**	**F**
-3	-7	-8

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7 Which diagram shows how to form the minor matrix for the entry at row 2, column 1 by crossing out its row and column?

A

$$\begin{bmatrix} 5 & 3 & 9 \\ 2 & 7 & 1 \\ 6 & 4 & 8 \end{bmatrix}$$

B

$$\begin{bmatrix} 5 & 3 & 9 \\ 2 & 7 & 1 \\ 6 & 4 & 8 \end{bmatrix}$$

C

$$\begin{bmatrix} 5 & 3 & 9 \\ 2 & 7 & 1 \\ 6 & 4 & 8 \end{bmatrix}$$

D

$$\begin{bmatrix} 5 & 3 & 9 \\ 2 & 7 & 1 \\ 6 & 4 & 8 \end{bmatrix}$$

8 Which is the minor matrix for the entry at row 1, column 2?

A $[7]$

B $[6]$

C $[9]$

9 Which shows how to calculate the determinant of this matrix?

$$\begin{bmatrix} 1 & -8 \\ -5 & -8 \end{bmatrix}$$

A $(1 \cdot -5) - (-8 \cdot -8)$

B $(-8 \cdot -5) - (1 \cdot -8)$

C $(1 \cdot -8) - (-8 \cdot -5)$

10 What is the entry at row 1, column 1 of the matrix of minors of this matrix?

A	B	C
-58	-60	-57
D	**E**	**F**
-54	-62	-56

11 What is the determinant of the minor matrix for the entry at row 3, column 2?

A	B	C
-5	-3	-7
D	**E**	**F**
-6	-4	-9