

Calculate cofactors of a matrix

- 1** Which shows row 1 of the cofactor matrix of this matrix? Fill only that row and leave the other entries blank.

A $\begin{bmatrix} 5 & -10 \\ \square & \square \end{bmatrix}$

B $\begin{bmatrix} 2 & -9 \\ \square & \square \end{bmatrix}$

C $\begin{bmatrix} 2 & -7 \\ \square & \square \end{bmatrix}$

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

- 2** What is the entry at row 2, column 2 of the cofactor matrix of this matrix?

A 2

B -3

C -5

D -8

E -4

F 0

- 3** Which shows column 2 of the cofactor matrix of this matrix of minors? Fill only that column and leave the other entries blank. Apply the sign pattern $(-1)^{i+j}$ to each entry of the matrix of minors.

A $\begin{bmatrix} \square & -9 & \square \\ \square & -3 & \square \\ \square & -2 & \square \end{bmatrix}$

B $\begin{bmatrix} \square & -9 & \square \\ \square & -4 & \square \\ \square & -2 & \square \end{bmatrix}$

C $\begin{bmatrix} \square & -9 & \square \\ \square & -4 & \square \\ \square & -4 & \square \end{bmatrix}$

D $\begin{bmatrix} \square & -9 & \square \\ \square & -3 & \square \\ \square & -1 & \square \end{bmatrix}$

- 4** Which is the cofactor matrix of this matrix of minors? Apply the sign pattern $(-1)^{i+j}$ to each entry of the matrix of minors.

$$\begin{bmatrix} 0 & 0 & -9 \\ -1 & -7 & -6 \\ 3 & 0 & 0 \end{bmatrix}$$

A $\begin{bmatrix} 0 & 0 & -12 \\ 1 & -7 & 9 \\ 3 & 0 & 0 \end{bmatrix}$

B $\begin{bmatrix} 0 & 0 & -9 \\ 1 & -7 & 6 \\ 3 & 0 & 3 \end{bmatrix}$

C $\begin{bmatrix} 0 & 0 & -9 \\ 1 & -4 & 6 \\ 3 & 0 & 0 \end{bmatrix}$

D $\begin{bmatrix} 0 & 0 & -9 \\ 1 & -7 & 6 \\ 3 & 0 & 0 \end{bmatrix}$

- 5** What is the entry at row 2, column 1 of the cofactor matrix of this matrix of minors? Apply the sign pattern $(-1)^{i+j}$ to each entry of the matrix of minors.

A 7

B 8

C 5

D -2

E 2

F 4

- 6** What is the entry at row 1, column 1 of the cofactor matrix of this matrix of minors? Apply the sign pattern $(-1)^{i+j}$ to each entry of the matrix of minors.

A 3

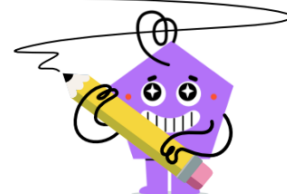
B 1

C 0

D 4

E -1

F 7



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- 7** Which shows row 1 of the cofactor matrix of this matrix of minors? Fill only that row and leave the other entries blank. Apply the sign pattern $(-1)^{i+j}$ to each entry of the matrix of minors.

A $\begin{bmatrix} 7 & -4 \\ \square & \square \end{bmatrix}$	B $\begin{bmatrix} 7 & -2 \\ \square & \square \end{bmatrix}$
C $\begin{bmatrix} 8 & -4 \\ \square & \square \end{bmatrix}$	

- 8** Which is the cofactor matrix of this matrix of minors? Apply the sign pattern $(-1)^{i+j}$ to each entry of the matrix of minors.

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

A $\begin{bmatrix} -1 & -6 \\ 7 & 0 \end{bmatrix}$	B $\begin{bmatrix} -1 & -4 \\ 7 & -2 \end{bmatrix}$
C $\begin{bmatrix} -1 & -4 \\ 9 & -2 \end{bmatrix}$	D $\begin{bmatrix} -1 & -4 \\ 7 & -1 \end{bmatrix}$

- 9** Which grid shows the cofactor signs for a matrix of this size?

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

A $\begin{bmatrix} + & - & + \\ - & + & - \\ + & - & + \end{bmatrix}$	B $\begin{bmatrix} - & + & - \\ + & - & + \\ - & + & - \end{bmatrix}$
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- 10** Which grid shows the cofactor signs for a matrix of this size?

$$\begin{bmatrix} -5 & -6 \\ 7 & 7 \end{bmatrix}$$

A $\begin{bmatrix} + & - \\ - & + \end{bmatrix}$	B $\begin{bmatrix} - & + \\ + & - \end{bmatrix}$
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- 11** What is the entry at row 1, column 3 of the matrix of minors of this matrix?

A -11	B -9	C -17
D -12	E -15	F -6

- 12** Which shows how to calculate the determinant of this matrix?

$$\begin{bmatrix} 3 & 4 \\ -7 & -6 \end{bmatrix}$$

A	$(3 \cdot -6) - (4 \cdot -7)$
B	$(4 \cdot -7) - (3 \cdot -6)$
C	$(3 \cdot -7) - (4 \cdot -6)$