



Matrices - Find Determinant of Minor Matrix from Number (3x3)

1 Find the determinant of the 2x2 'minor' matrix for the '3' at row 3 and

$$\det(M_{31}) \text{ for } \begin{bmatrix} 5 & 4 & 4 \\ 2 & 4 & 0 \\ 3 & 6 & 4 \end{bmatrix}$$

A	B	C	D	E	F
-16	-19	-10	0	-21	-22

2 Find the determinant of the 2x2 'minor' matrix for the '2' at row 3 and

$$\det(M_{31}) \text{ for } \begin{bmatrix} 5 & 3 & 9 \\ 3 & 5 & 7 \\ 2 & 1 & 0 \end{bmatrix}$$

A	B	C	D	E	F
-17	-31	-24	-36	-6	9

3 Find the determinant of the 2x2 'minor' matrix for the '7' at row 2 and

$$\det(M_{22}) \text{ for } \begin{bmatrix} 8 & 1 & 1 \\ 4 & 7 & 3 \\ 5 & 8 & 8 \end{bmatrix}$$

A	B	C	D	E	F
35	12	59	-18	-14	-11

4 Find the determinant of the 2x2 'minor' matrix for the '1' at row 3 and

$$\det(M_{32}) \text{ for } \begin{bmatrix} 6 & 2 & 6 \\ 3 & 4 & 0 \\ 4 & 1 & 3 \end{bmatrix}$$

A	B	C	D	E	F
14	-16	-25	-8	11	-18

5 Find the determinant of the 2x2 'minor' matrix for the '8' at row 1 and

$$\det(M_{11}) \text{ for } \begin{bmatrix} 8 & 5 & 1 \\ 2 & 9 & 6 \\ 9 & 2 & 6 \end{bmatrix}$$

A	B	C	D	E	F
18	42	-3	29	5	0

6 Find the determinant of the 2x2 'minor' matrix for the '6' at row 2 and

$$\det(M_{23}) \text{ for } \begin{bmatrix} 7 & 2 & 8 \\ 0 & 5 & 6 \\ 5 & 1 & 3 \end{bmatrix}$$

A	B	C	D	E	F
9	-3	0	-2	-12	-5

7 Find the determinant of the 2x2 'minor' matrix for the '2' at row 2 and

$$\det(M_{21}) \text{ for } \begin{bmatrix} 1 & 4 & 1 \\ 2 & 0 & 1 \\ 3 & 3 & 4 \end{bmatrix}$$

A	B	C	D	E	F
18	14	4	13	12	10

8 Find the determinant of the 2x2 'minor' matrix for the '3' at row 3 and

$$\det(M_{31}) \text{ for } \begin{bmatrix} 4 & 8 & 1 \\ 1 & 4 & 4 \\ 3 & 0 & 8 \end{bmatrix}$$

A	B	C	D	E	F
1	28	20	18	34	-23