Math worksheet on *'Matrices - Find Determinant of Minor Matrix from Number (3x3) (Level 1)'*. Part of a broader unit on *'Matrices'*

Learn online: app.mobius.academy/math/units/matrices/

1 Find the determinant of the 2x2 'minor' matrix for the '0' at row 1 and column 1

$$det(M_{11})\ for \begin{bmatrix} 0 & 1 & 7 \\ 5 & 1 & 7 \\ 6 & 2 & 1 \end{bmatrix}$$

a	b	c	d	e	f
-18	0	-12	18	-21	-13

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

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

a	b	c	d	e	f
9	-36	-31	-24	-17	-6

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

$$det(M_{13})\ for \begin{bmatrix} 4 & 4 & 3 \\ 2 & 4 & 5 \\ 0 & 5 & 4 \end{bmatrix}$$

a	b	c	d	e	f
-6	10	7	-24	14	0

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

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

a	b	c	d	e	f
13	12	18	14	4	10

5 Find the determinant of the 2x2 'minor' matrix for the '6' at row 2 and column 1

$$det(M_{21})\ for \begin{bmatrix} 8 & 3 & 5 \\ 6 & 0 & 9 \\ 5 & 7 & 9 \end{bmatrix}$$

a	b	c	d	e	f
-5	-4	-12	10	-8	0

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

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

a	b	c	d	e	f
17	-3	-2	19	0	-19

7 Find the determinant of the 2x2 'minor' matrix for the '9' at row 3 and column 2

$$det(M_{32})\ for \begin{bmatrix} 6 & 8 & 0 \\ 7 & 2 & 8 \\ 0 & 9 & 8 \end{bmatrix}$$

a	b	c	d	e	f
48	-3	-12	0	19	3