[gex41] Matrix operations II: Laplace expansion of determinant

Consider the constant square matrix,

$$\mathbf{M} = \begin{pmatrix} 2 & -1 & 1 \\ 3 & 2 & -5 \\ 1 & 4 & -2 \end{pmatrix}.$$

(a) Calculate the minors of **M**.
(b) Calculate the determinant of **M** from the minors via cofactors as explained in [gmd6].
(c) Check your result with the Det command of Mathematica.
Create a Mathematica notebook to carry out these tasks.

Solution: