$$|\mathbf{I} + \epsilon \mathbf{M}| = \begin{vmatrix} \epsilon M_{12} & 1 + \epsilon M_{22} & \epsilon M_{32} & \epsilon M_{42} & \epsilon \\ \epsilon M_{13} & \epsilon M_{23} & 1 + \epsilon M_{33} & \epsilon M_{43} & \epsilon \\ \epsilon M_{14} & \epsilon M_{24} & \epsilon M_{34} & 1 + \epsilon M_{44} & \epsilon \\ \epsilon M_{15} & \epsilon M_{25} & \epsilon M_{35} & \epsilon M_{45} & 1 + \delta \\ = (1 + \epsilon M_{11}) C_{11} & -\epsilon M_{21} C_{21} + \epsilon M_{31} C_{31} - \epsilon M_{41} C_{41} + \epsilon M_{51} C_{51} \end{vmatrix}$$