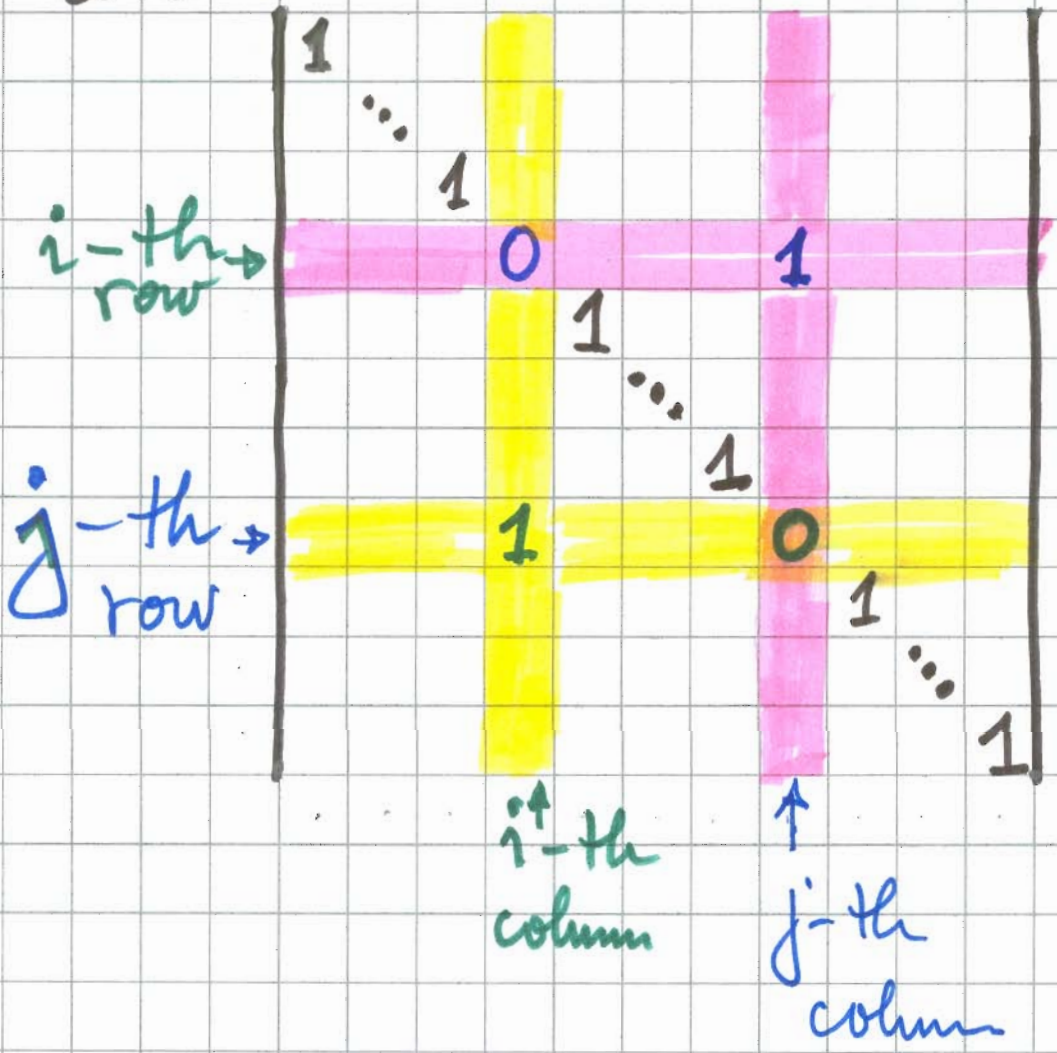
unspecified entries are zeros

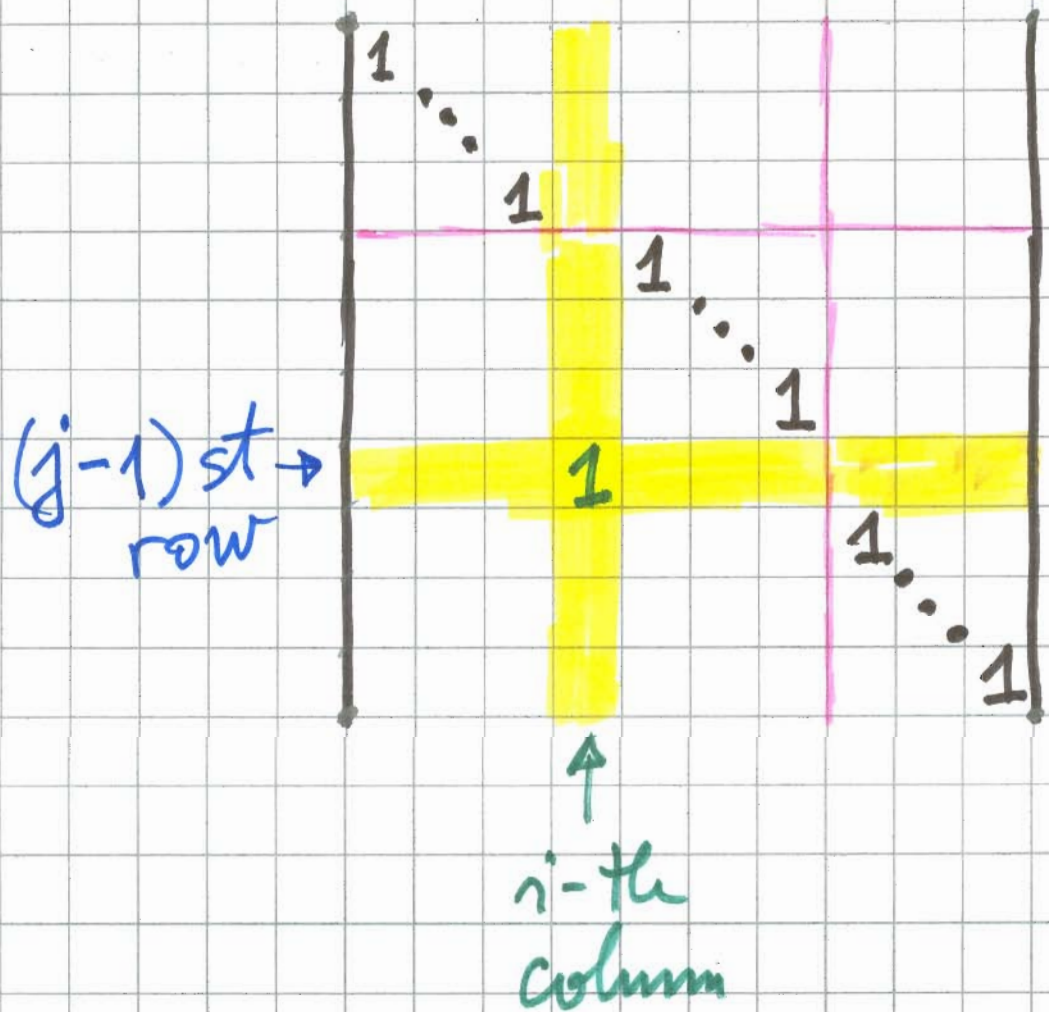
$n \times n$ matrix



$$(-1)^{i+j} * 1 *$$ the determinant on the next page

unspecified entries are zeros

$(n-1) \times (n-1)$ matrix

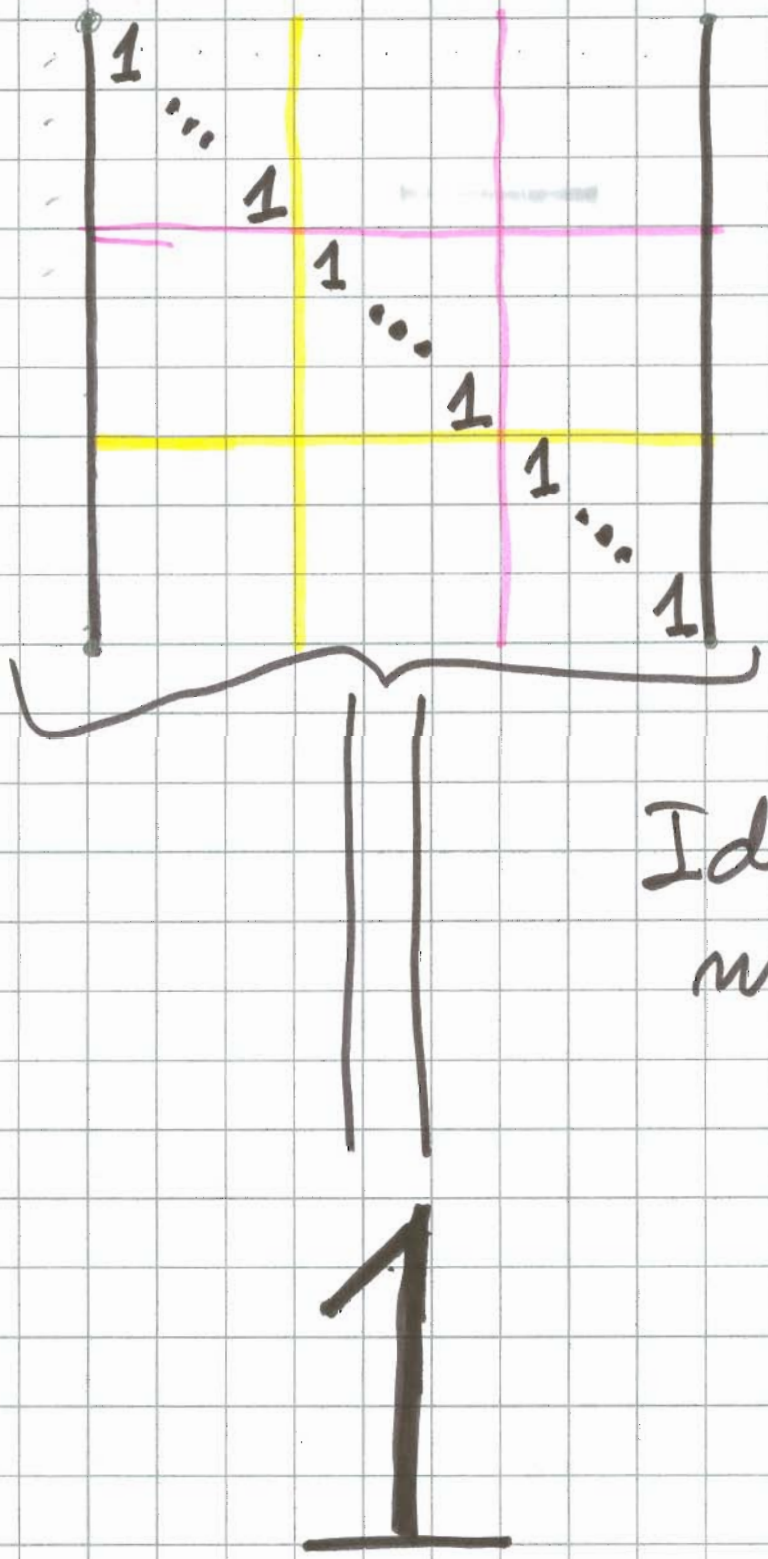


$$(-1)^{i+j} * 1 * (-1)^{(j-1)+i} * 1 * \Uparrow$$

the determin. on the next page

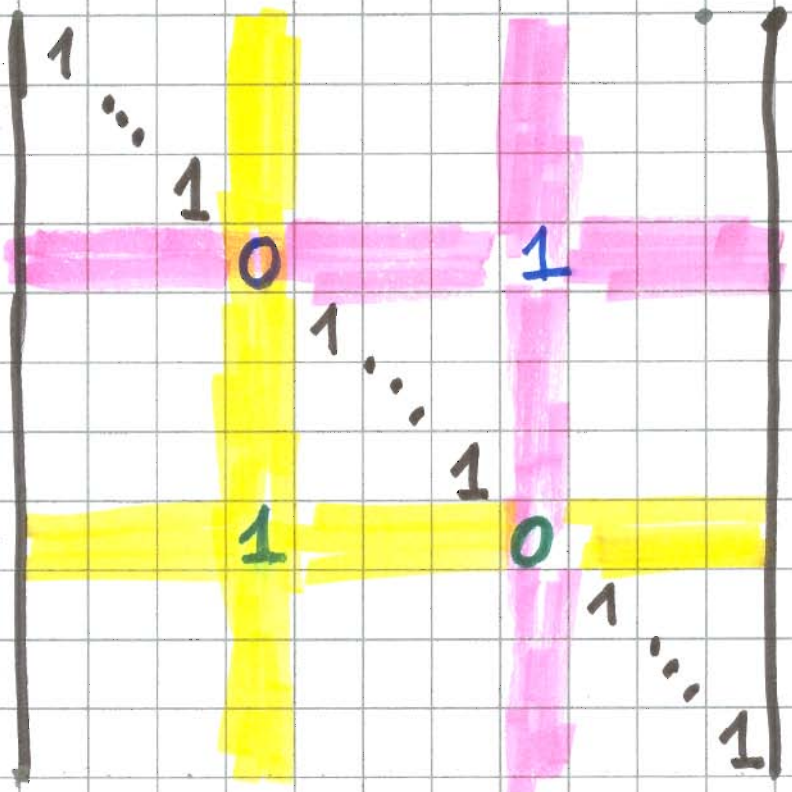
unspecified entries are zeros

$(n-2)\times(n-2)$ matrix



Identity matrix

unspecified entries are zeros



$$\underbrace{(-1)^{i+j}\,(-1)^{(j-1)+i}}_{\| \;\; (-1)^{2i+2j-1}} = -1$$