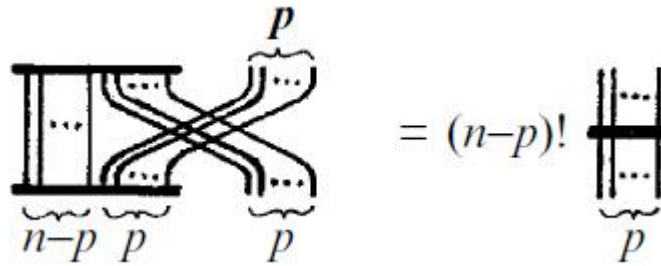
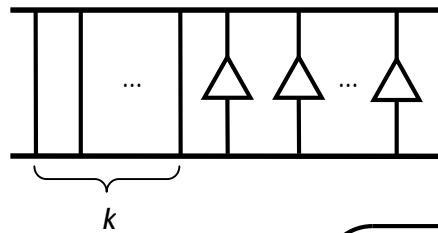


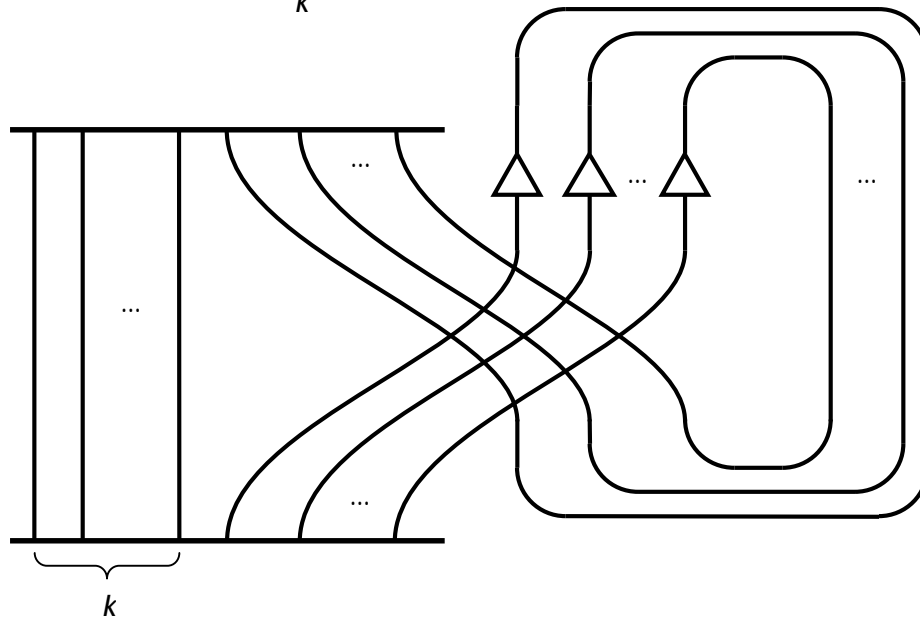
From figure 12.18:



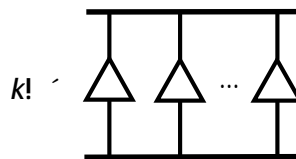
And so, we can draw this:



As this:



Which then just reduces to this:



So (with a change slight change in variables) the final formula for the determinant becomes:

$$\det(\mathbf{T} - I\mathbf{I}) = \sum_{k=0}^n \left(\frac{(-1)^{n-k}}{k!} \underbrace{\quad}_k \right)$$