



Math for the people, by the people.

## Latin square

|                  |                     |
|------------------|---------------------|
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A *Latin square* of  $n$  is an  $n \times n$  array such that each column and each row are made with the same  $n$  symbols, using every one exactly once .

Examples.

$$\begin{pmatrix} a & b & c & d \\ c & d & a & b \\ d & c & b & a \\ b & a & d & c \end{pmatrix} \quad \begin{pmatrix} 1 & 2 & 3 & 4 \\ 4 & 3 & 2 & 1 \\ 2 & 1 & 4 & 3 \\ 3 & 4 & 1 & 2 \end{pmatrix}$$