Triangular Matrices

1 Why

TODO; arise often.

2 Definition

A matrix is *upper triangular* if all its entries below the diagonal are zero. A matrix is *lower triangular* if all its entries above the diagonal are zero. If, in addition, the diagonal is zero, then the matrix is *strictly upper triangular* and *strictle lower triangular* respectively.

A *triangular* matrix is either upper or lower triangular. A *strictly triangular* matrix is either strictly upper triangular or strictly lower triangular.

A *unit triangular matrix* is a triangular matrix (upper or lower) whose diagonal entries are one.

3 Other Terminology

Some authors call lower triangular matrices *right triangular* and upper