**rcond**

*Function of calculating value reverse to matrix conditioning number.*

**Syntax:**

*x* = **rcond**(*M*);

**Arguments:**

*M* – input matrix.

**Description:**

*rcond(M)* – function returns value reverse to matrix conditioning number based on the first norm. The value can be obtained using the expression:

Matrix *М* can be assigned:

* as variable of matrix type determined earlier:

*x* = **rcond**(*M*);

* as matrix consisting of variables determined earlier:

*x* = **rcond**([[*x1,x2*],[*x3,x4*],[*x5,x6*]]);

* as constant matrix:

*x* = **rcond**([[1,2],[3,4],[5,6]]);

**Result:**

*х* – value reverse to matrix *M* conditioning number based on the first norm.

**Example:**

|  |  |
| --- | --- |
|  | **const**M = [[1, -3, 2], [4, 5, -1], [3, 8, -6]];  x = **rcond**(M); |

As a result, variable *x* will be assigned value reverse to matrix *M* conditioning number equal 0.053125.