**arccos**

*Function of calculating arc cosine of real or complex number.*

**Syntax:**

*y* **= arccos***(x);*

**Arguments:**

*x* – input value.

**Description:**

*arccos(x)* – function of calculating arc cosine of real or complex number.

The input value can be both real and complex number.

The real input value is restricted by a condition: .

The input value can be assigned either as a preliminarily determined variable, or as a constant number.

A complex number shall be assigned by the expression *a*+*b*i, where *a* and *b* are real and virtual number parts, accordingly.

**Result:**

*y* – arc cosine of input value *x*.

**Example 1:**

*Arc cosine* *of real number*

|  |  |
| --- | --- |
|  | **const** x = 0.5;  y = **arccos**(x); |

As a result, variable *y* will be assigned a value 1.0471976.

**Example 2:**

*Arc cosine* *of complex number*

|  |  |
| --- | --- |
|  | y = **arccos**(3+4i); |

As a result, variable *y* will be assigned a value 0.93681246-2.305509i.