**sqrt**

*Function of calculating square root of real or complex number.*

**Syntax:**

*y* **= sqrt***(x);*

**Arguments:**

*x* – input value.

**Description:**

*sqrt(x)* – function of calculating square root of real or complex number. The input value shall be a positive number.

The input value can be assigned as a variable determined earlier or as a constant number.

The input value shall be both real and complex number.

If the input value is a real number, the returnable value is also a real number.

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

**Result:**

*y* – square root from input value *x*.

**Example 1:**

*Square root of real number*

|  |  |
| --- | --- |
|  | **const** x = 5;  y =**sqrt**(x); |

As a result, variable *y* shall be assigned value 2.236068.

**Example 2:**

*Square root of complex number*

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

As a result, variable *y* shall be assigned value 2+1i.