**exp**

*Function of calculating exponential curve of real and complex number.*

**Syntax:**

*y* **= exp***(x);*

**Arguments:**

*x* – input values.

**Description:**

*exp(x)* – function of calculating exponential curve of real and complex number.

The input value can be both real and complex number.

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* – exponential curve of input value *x* is determined by expression e^*x*, where e is a basis of natural logarithm.

**Example 1:**

*Exponential curve of real number*

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

As a result, variable *y* will be assigned value 148.41316.

**Example 2:**

*Exponential curve of complex number*

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

As a result, variable *y* will be assigned value -13.128783-15.200784i.