

Table of Contents

- [Calculator](#)
 - [clear](#)
 - [setActiveOp](#)
 - [clearActiveOp](#)
 - [getActiveOp](#)
 - [append](#)
- [TQadd](#)
- [TQsub](#)
- [TQdiv](#)
- [TQmul](#)
- [TQfact](#)
- [TQpow](#)
- [TQsqrt](#)
- [TQsin](#)
- [TQcos](#)

Calculator core class

Meta

- **author:** Jozef Hruška <xhrusk25@vutbr.cz>

Calculator

Functions as calculator core. Handles communication with calculator screen.

clear

Clear Calculator to it's default state

setActiveOp

Set active operator (+, -, /, *)

Parameters

- index [number](#)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
Array position of operator (0: /, 1: *, 2: -, 3: +)

clearActiveOp

Clear array of operators (sets no active operation)

getActiveOp

- **See:** `setActiveOp`

Get the currently active operation

Returns **any** Operation array position or false if no operation is active

append

Append new value to the end of history(results) array

Parameters

- value [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
Newest value(result) returned by calculator

Mathematical library

Meta

- **author:** Tomáš Čikel <xcikel00@vutbr.cz>

TQadd

Addition

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
First number to add
- b [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
Second number to add

Returns **any** Sum of arguments 'a' and 'b' or false if arguments are not correct

TQsub

Subtraction

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
First number from which will be subtracted
- b [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
Second number which will be subtracted

Returns **any** Difference of arguments 'a' and 'b' or false if arguments are not correct

TQdiv

Division

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
First number (Divident)
- b [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
Second number (Divisor)

Returns **any** Division of arguments 'a' and 'b' or false if arguments are not correct

TQmul

Multiplication

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
First number to multiply
- b [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
Second number to multiply

Returns **any** Multiplication of arguments 'a' and 'b' or false if arguments are not correct

TQfact

Factorial

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)

Returns **any** Factorial of argument 'a' or false if argument is not correct

TQpow

Exponentiation

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
First number (Base)
- n [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
Second number (Exponent)

Returns **any** Argument 'a' to the power of 'n'

TQsqrt

Square root – using Newton's method

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)

Returns **any** Square root of argument 'a' or false if argument is a negative number

TQsin

Sinus

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)

Returns **any** Sin of argument 'a' or false if no argument was given

TQcos

Cosinus

Parameters

- a [number](https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)
(https://developer.mozilla.org/docs/Web/JavaScript/Reference/Global_Objects/Number)

Returns **any** Cosinus of argument 'a' or false if now argument was given

Main calculator screen – renderer process

Meta

- **author:** Patrik Strnad <xstrna11@vutbr.cz>