JAVASCRIPT and MATH

**Operator** **Description** **Example** **Result in y** **Result in x**

+ Addition x = y + 2 y = 5 x = 7

- Subtraction x = y - 2 y = 5 x = 3

\* Multiplication x = y \* 2 y = 5 x = 10

/ Division x = y / 2 y = 5 x = 2.5

% Modulus(div) x = y % 2 y = 5 x = 1

**Method** **Description**

abs(x) Returns the absolute value of x

acos(x) Returns the arccosine of x, in radians

asin(x) Returns the arcsine of x, in radians

atan(x) Returns the arctangent of x as a numeric value between -PI/2 and PI/2 radians

atan2(y,x) Returns the arctangent of the quotient of its arguments

ceil(x) Returns the value of x rounded up to its nearest integer

cos(x) Returns the cosine of x (x is in radians)

exp(x) Returns the value of Ex

floor(x) Returns the value of x rounded down to its nearest integer

log(x) Returns the natural logarithm (base E) of x

max(x,y,z,...,n) Returns the number with the highest value

min(x,y,z,...,n) Returns the number with the lowest value

pow(x,y) Returns the value of x to the power of y

random() Returns a random number between 0 and 1

round(x) Returns the value of x rounded to its nearest integer

sin(x) Returns the sine of x (x is in radians)

sqrt(x) Returns the square root of x

tan(x) Returns the tangent of an angle

E Returns Euler's number (approx. 2.718)

LN2 Returns the natural logarithm of 2 (approx. 0.693)

LN10 Returns the natural logarithm of 10 (approx. 2.302)

LOG2E Returns the base-2 logarithm of E (approx. 1.442)

LOG10E Returns the base-10 logarithm of E (approx. 0.434)

PI Returns PI (approx. 3.14)

SQRT1\_2 Returns the square root of 1/2 (approx. 0.707)

SQRT2 Returns the square root of 2 (approx. 1.414)

**useful links:**

<http://www.w3schools.com/js/default.asp>

<https://www.youtube.com> > thenewboston channel > javascript

**For example:**

x = 2;  
 x = a + b;

x = b \* 2;

x = 2 \* (a + b) ;  
x = (a + b) / (2\*a) + Math.Pi \* Math.Round(a/2); ’ Arghhh….. XD ’

and so on…