## JS

## Math object

Math.cos(60)

```
const PI = Math.PI
                           // 3.141592653589793
console.log(PI)
// Rounding to the closest number
// if above.5 up if less 0.5 down rounding
console.log(Math.round(PI))
                                 // 3 to round values to the nearest number
console.log(Math.round(9.81))
                                  // 10
console.log(Math.floor(PI))
                                // 3 rounding down
console.log(Math.ceil(PI))
                              // 4 rounding up
console.log(Math.min(-5, 3, 20, 4, 5, 10)) // -5, returns the minimum value
console.log(Math.max(-5, 3, 20, 4, 5, 10)) // 20, returns the maximum value
const randNum = Math.random() // creates random number between 0 to 0.999999
console.log(randNum)
// Let us create random number between 0 to 10
const num = Math.floor(Math.random () * 11) // creates random number between 0 and 10
console.log(num)
//Absolute value
console.log(Math.abs(-10)) // 10
//Square root
console.log(Math.sqrt(100)) // 10
console.log(Math.sqrt(2)) // 1.4142135623730951
// Power
console.log(Math.pow(3, 2)) // 9
console.log(Math.E)
                      // 2.718
// Logarithm
// Returns the natural logarithm with base E of x, Math.log(x)
console.log(Math.log(2)) // 0.6931471805599453
console.log(Math.log(10)) // 2.302585092994046
// Returns the natural logarithm of 2 and 10 respectively
console.log(Math.LN2)
                          // 0.6931471805599453
console.log(Math.LN10) // 2.302585092994046
// Trigonometry
Math.sin(0)
Math.sin(60)
Math.cos(0)
```