

Type Conversions

The typeof Operator

Example

```
typeof "John"           // Returns "string"
typeof 3.14             // Returns "number"
typeof NaN             // Returns "number"
typeof false           // Returns "boolean"
typeof [1,2,3,4]       // Returns "object"
typeof {name:'John', age:34} // Returns "object"
typeof new Date()      // Returns "object"
typeof function () {} // Returns "function"
typeof myCar           // Returns "undefined" *
typeof null           // Returns "object"
```

Here is how to convert strings to numbers

```
//adding strings//  
var x = '51';  
var y = '7';  
  
var Total = (x + y);  
  
alert(Total);
```

answer:
517

//converting strings to numbers you must add a + sign before the number//

```
var x = + 51; //here you can see the string is now a number//  
var y = + 7; //same here//  
  
var Total = (x + y);  
  
alert(Total)
```

answer: 58

Here is how to convert Booleans to numbers and back to string.

```
//Turn Booleans into numbers//
```

```
Number(true)
```

```
Number(false)
```

```
var Total = (true + false)
```

```
alert(Total)
```

answer: 1

```
//boolean into string//
```

```
String(false)
```

```
var Total = (false + y);
```

```
alert(Total)
```

answer:
false7

Original Value	Converted to Number	Converted to String	Converted to Boolean
false	0	"false"	false
true	1	"true"	true
0	0	"0"	false
1	1	"1"	true
"0"	0	"0"	true
"1"	1	"1"	true
NaN	NaN	"NaN"	false
Infinity	Infinity	"Infinity"	true
-Infinity	-Infinity	"-Infinity"	true
""	0	""	false
"20"	20	"20"	true
"twenty"	NaN	"twenty"	true

Red values indicate values (some) programmers might not expect.

http://www.w3schools.com/js/js_type_conversion.asp