Using Math and Comparison Operators

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Module Goals

JavaScript operators

- Math
- Assignment
- Comparison

Plus sign with strings and numbers

'use strict' functionality

Mathematical Operators

Operator	Example
Addition (+)	2 + 3
Subtraction (-)	4 - 2
Multiplication (*)	2 * 2
Division (/)	8 / 4
Exponentiation (**)	2 ** 2
Modulus (%)	9 % 4
Increment (++)	index++
Decrement (--)	index--

Demo

Math operators

Plus Sign with Strings and Numbers

Plus sign is overloaded

Strings = Concatentation

Numbers = Addition

Plus Sign with Strings and Numbers

What if one is a number and one is a string?

result = 100 + "200"

If one is a string = concatenation

Demo

Plus sign

Assignment Operators

Operator	Example
Equal (=)	price = 10;
Addition (+=)	price += 5;
Subtraction (-=)	price -= 2;
Multiplication (*=)	price *= 3;
Division (/=)	price /= 1.5
Exponentiation (**=)	price **= 2;
Modulus (%=)	price %= 3;

Demo

Assignment operators

Comparison Operators

Operator	Example
Less than (<)	price < 10;
Less than or equal to (<=)	price <= 10;
Greater than (>)	price > 10;
Greater than or equal to (>=)	price >= 10;
Equal in value (==)	price == "10"; // true
Equal in value and type (===)	price === "10"; // false
Not equal in value (!=)	price != "10"; // false
Not equal in value and type (!==)	price !== "10"; // true

Demo

Comparison operators

'use strict'

Ignored by older browsers

Forces all variables to be declared

Mistyped variable names are created globally scoped

A few other rules...

Demo

'use strict' demo

Summary

Recognize the different operators

- Math
- Assignment
- Comparison

Effects of number + string

Effects of 'use strict'

Coming up in the next module...

Logical operators

Truthy and falsy

How short-circuit evaluation works