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 (+)

Subtraction (-)

Multiplication (*)

Division (/)

Exponentiation (**)

Modulus (%)

Increment (++)

Decrement (--)

2 + 3

4 - 2

2 * 2

8 / 4

2 ** 2

9 % 4

index++

index--





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





Plus sign



Assignment Operators

Operator

Equal (=)

Addition (+=)

Subtraction (-=)

Multiplication (*=)

Division (/=)

Exponentiation (**=)

Modulus (%=)

Example

price = 10;

price += 5;

price -= 2;

price *= 3;

price /= 1.5

price **= 2;

price %= 3;





Assignment operators



Comparison Operators

Operator

Less than (<)

Less than or equal to (<=)

Greater than (>)

Greater than or equal to (>)

Equal in value (==)

Equal in value and type (===)

Not equal in value (!=)

Not equal in value and type (!==)

Example

```
price < 10;
price <= 10;
price > 10;
price >= 10:
price == "10"; // true
price === "10"; // false
price != "10"; // false
price !== "10"; // true
```





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...





'use strict' demo



Summary



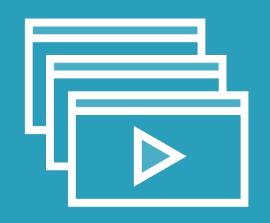
Recognize the different operators

- 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

