

Operator Precedence

This lesson focusses and emphasizes on operator precedence along with relevant examples.

WE'LL COVER THE FOLLOWING

- Operators precedence from **highest to lowest** precedence.
- Quiz time! :)



Operator Precedence



When you use compound expressions, it is very rare that operators are evaluated from left to right. For example, the following expression results in **7**, and not **9**:

js index.js

```
var expr = 1 + 2 * 3;  
console.log(expr);
```



The precedence of the multiply operator is higher than the precedence of the

add operator, so first `2*3` will be evaluated to 6, and then `1 + 6` is calculated.

You can override the precedence of operators with parentheses. For example, this expression will result in 9:

js index.js

```
var expr = (1 + 2) * 3;  
console.log(expr);
```





Just as in every programming language, operator precedence is declared in JavaScript, too.

The table below summarizes the operators with their precedence, ordered from **highest to lowest** precedence.

Operators with the same precedence are evaluated from left to right.

Operators precedence from **highest to lowest** precedence.

Operator	Description
<code>· [] ()</code>	Field access, array indexing, function calls, and expression grouping
<code>+ - ++ -- ~ ! delete new typeof</code>	Unary operators, delete operator, object creation, typeof operator
<code>* / %</code>	Multiplicative operators
<code>+ -</code>	Addition (string concatenation), subtraction
<code><< >> >>></code>	Bitwise shift operators
<code>< <= > >= instanceof</code>	Relational operators, instanceof operator
<code>== != === !==</code>	Equality operators
<code>&</code>	Bitwise AND
<code>^</code>	Bitwise XOR
<code> </code>	Bitwise OR
<code>&&</code>	Logical AND
<code> </code>	Logical OR
<code>?:</code>	Conditional operator
<code>= += -= *= /= %= <<= >>= >>>=</code>	Assignment and compound assignment operators
<code>,</code>	Comma operator

Quiz time! :)

It's time to test how much we've learned in this lesson with a short quiz!

Question 1

Q

What is the order of operations for the following piece of code?

```
let num_js = (19 + 10) * (10 - 10);
```

Check Answers

Question 2

Q

What is the value for the following set of operations?

$$10 * ((2 - 7) + 20) / 5$$

Check Answers

In the *next lesson*, we are going to discuss flow-control statements.

See you there!