|  |  |  |  |
| --- | --- | --- | --- |
| Operator Precedence Values  Expressions in parentheses are computed **before** the rest of the expression Function are executed **before** the result is used in the rest of the expression | | | |
| Val | Operator | Description | Example |
| 18 | ( ) | [Expression Grouping](https://www.w3schools.com/js/tryit.asp?filename=tryjs_arithmetic_precedence2) | (100 + 50) \* 3 |
| 17 | . | [Member Of](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_member_of) | person.name |
| 17 | [] | [Member Of](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_member_of2) | person["name"] |
| 17 | ?. | [Optional Chaining](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_optional_chaining) [ES2020](https://www.w3schools.com/js/js_2019.asp) | x ?. y |
| 17 | () | [Function Call](https://www.w3schools.com/js/tryit.asp?filename=tryjs_functions) | myFunction() |
| 17 | new | [New with Arguments](https://www.w3schools.com/js/tryit.asp?filename=tryjs_date_new_arguments) | new Date("June 5,2022") |
| 16 | new | [New without Arguments](https://www.w3schools.com/js/tryit.asp?filename=tryjs_date_current) | new Date() |
| Increment Operators Postfix increments are executed **before** prefix increments | | | |
| 15 | ++ | [Postfix Increment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_incr2) | i++ |
| 15 | -- | [Postfix Decrement](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_decr2) | i-- |
| 14 | ++ | [Prefix Increment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_incr) | ++i |
| 14 | -- | [Prefix Decrement](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_decr) | --i |
| NOT Operators | | | |
| 14 | ! | [Logical NOT](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_not) | !(x==y) |
| 14 | ~ | [Bitwise NOT](https://www.w3schools.com/js/tryit.asp?filename=tryjs_bitwise_not) | ~x |
| Unary Operators | | | |
| 14 | + | [Unary Plus](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_unary_plus) | +x |
| 14 | - | [Unary Minus](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_unary_minus) | -x |
| 14 | typeof | [Data Type](https://www.w3schools.com/js/tryit.asp?filename=tryjs_typeof_all) | typeof x |
| 14 | void | [Evaluate Void](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_void) | void(0) |
| 14 | delete | [Property Delete](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_delete) | delete myCar.color |
| Arithmetic Operators Exponentiations are executed **before** multiplications Multiplications and divisions are executed **before** additions and subtractions | | | |
| 13 | \*\* | [Exponentiation](https://www.w3schools.com/js/tryit.asp?filename=tryjs_arithmetric_exponent1) [ES2016](https://www.w3schools.com/js/js_2016.asp) | 10 \*\* 2 |
| 12 | \* | [Multiplication](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_mult) | 10 \* 5 |
| 12 | / | [Division](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_div) | 10 / 5 |
| 12 | % | [Division Remainder](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_mod) | 10 % 5 |
| 11 | + | [Addition](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_add) | 10 + 5 |
| 11 | - | [Subtraction](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_sub) | 10 - 5 |
| 11 | + | [Concatenation](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_concatenate) | "John" + "Doe" |
| Shift Operators | | | |
| 10 | << | [Shift Left](https://www.w3schools.com/js/tryit.asp?filename=tryjs_bitwise_left) | x << 2 |
| 10 | >> | [Shift Right (signed)](https://www.w3schools.com/js/tryit.asp?filename=tryjs_bitwise_right_sign) | x >> 2 |
| 10 | >>> | [Shift Right (unsigned)](https://www.w3schools.com/js/tryit.asp?filename=tryjs_bitwise_right) | x >>> 2 |
| Relational Operators | | | |
| 9 | in | [Property in Object](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_in) | "PI" in Math |
| 9 | instanceof | [Instance of Object](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_instanceof) | x instanceof Array |
| Comparison Operators | | | |
| 9 | < | [Less than](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison9) | x < y |
| 9 | <= | [Less than or equal](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison11) | x <= y |
| 9 | > | [Greater than](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison8) | x > y |
| 9 | >= | [Greater than or equal](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison10) | x >= Array |
| 8 | == | [Equal](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison1) | x == y |
| 8 | === | [Strict equal](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison4) | x === y |
| 8 | != | [Unequal](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison5) | x != y |
| 8 | !== | [Strict unequal](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison6) | x !== y |
| Bitwise Operators | | | |
| 7 | & | [Bitwise AND](https://www.w3schools.com/js/tryit.asp?filename=tryjs_bitwise_and) | x & y |
| 6 | ^ | [Bitwise XOR](https://www.w3schools.com/js/tryit.asp?filename=tryjs_bitwise_xor) | x ^ y |
| 5 | | | [Bitwise OR](https://www.w3schools.com/js/tryit.asp?filename=tryjs_bitwise_or) | x | y |
| Logical Operators | | | |
| 4 | && | [Logical AND](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison_and) | x && y |
| 3 | || | [Logical OR](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison_or) | x || y |
| 3 | ?? | [Nullish Coalescing](https://www.w3schools.com/js/tryit.asp?filename=tryjs_nullish) [ES2020](https://www.w3schools.com/js/js_2019.asp) | x ?? y |
| Conditional (ternary) Operator | | | |
| 2 | ? : | [Condition](https://www.w3schools.com/js/tryit.asp?filename=tryjs_comparison) | ? "yes" : "no" |
| Assignment Operators Assignments are executed **after** other operations | | | |
| 2 | = | [Simple Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_equal) | x = y |
| 2 | : | [Colon Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_colon) | x: 5 |
| 2 | += | [Addition Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_plusequal) | x += y |
| 2 | -= | [Subtraction Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_minequal) | x -= y |
| 2 | \*= | [Multiplication Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_multequal) | x \*= y |
| 2 | \*\*= | [Exponentiation Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_exponential) | x \*\*= y |
| 2 | /= | [Division Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_divequal) | x /= y |
| 2 | %= | [Remainder Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_modequal) | x %= y |
| 2 | <<= | [Left Shift Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_left_shift) | x <<= y |
| 2 | >>= | [Right Shift Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_right_shift) | x >>= y |
| 2 | >>>= | [Unsigned Right Shift](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_unsigned_right_shift) | x >>>= y |
| 2 | &= | [Bitwise AND Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_bitwise_and) | x &= y |
| 2 | |= | [Bitwise OR Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_bitwise_or) | x |= y |
| 2 | ^= | [Bitwise XOR Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_bitwise_xor) | x ^= y |
| 2 | &&= | [Logical AND Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_logical_and) | x &&= y |
| 2 | ||= | [Logical OR Assignment](https://www.w3schools.com/js/tryit.asp?filename=tryjs_assign_logical_or) | x ||= y |
| 2 | => | [Arrow](https://www.w3schools.com/js/tryit.asp?filename=tryjs_arrow_function4) | x => y |
| 2 | yield | Pause / Resume | yield x |
| 2 | yield\* | Delegate | yield\* x |
| 2 | ... | [Spread](https://www.w3schools.com/js/tryit.asp?filename=tryjs_oper_spread_arguments) | ... x |
| 1 | , | Comma | x , y |