



# LEARN JAVASCRIPT

 Unraveling the Mysteries of JavaScript Operators: 10 Essential

Coding Questions! 

*Coding Questions and explanations!*

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Question: What is the result of `10 + 20 + "30"` in JavaScript?

Answer: The result is "3030".

Explanation: JavaScript performs the operation left to right. `10 + 20` is evaluated first, resulting in `30`. Then `30 + "30"` performs string concatenation, resulting in `"3030"`.

**Question: How does the `===` operator differ from `==` in JavaScript?**

Answer: `===` is the strict equality operator, while `==` is the loose equality operator.

Explanation: `===` compares both the value and type of the operands, whereas `==` converts the operands to the same type before making the comparison. For example, `0 == '0'` is true but `0 === '0'` is false.

**Question: What is the result of `!true && (!true || 100)`?**

Answer: The result is false.

Explanation: The not operator (`!`) flips true to false. So, the expression becomes `false && (false || 100)`. Since `false || 100` evaluates to `100` (truthy), the entire expression becomes `false && true`, which results in false.

**Question: What does the `??` operator do in JavaScript?**

Answer: It's the nullish coalescing operator.

Explanation: ?? returns the right-hand operand when the left-hand operand is null or undefined, otherwise it returns the left-hand operand. For example, null ?? 'default' results in 'default'.

Question: What will be the output of `3 > 2 > 1`?

Answer: The output is false.

Explanation: This is due to the left-to-right evaluation of operators. `3 > 2` is true, but true is treated as 1 in the next comparison, so it becomes `1 > 1`, which is false.

Question: What is the purpose of the typeof operator?

Answer: It returns a string indicating the type of the operand.

Explanation: For example, `typeof "Hello"` returns "string", and `typeof 5` returns "number".

Question: How does the post-increment operator work? Provide an example.

Answer: It increments the variable but returns the value before incrementing.

Explanation:

```
let x = 5;
```

```
let y = x++;
```

```
// x is now 6, but y is 5
```

Here,

y is assigned the value of x before x is incremented, so y becomes 5, and x becomes 6.

**Question: What will `4 | 3` return in JavaScript?**

Answer: It returns 7.

Explanation: The `|` operator performs a bitwise OR. In binary, 4 is 0100 and 3 is 0011. The OR operation on each bit gives 0111, which is 7 in decimal.

**Question: What is the result of the expression `2 ** 3`?**

Answer: The result is 8.

Explanation: The `**` operator is used for exponentiation. `2 ** 3` means 2 raised to the power of 3, which equals 8.

**Question: How does the comma operator `(,)` work in JavaScript? Provide an example.**

Answer: It evaluates each of its operands and returns the value of the last operand.

Explanation:

```
let a = (1, 2, 3);
```

Here, 1, 2, and 3 are evaluated, but a is assigned the value 3, which is the last operand.