

# JavaScript Numbers - Interview Questions (For Freshers)

## 1. Basic Theory

- What is the Number data type in JavaScript?
- What types of numbers are supported in JavaScript (integer, float, etc.)?
- What is the primitive type for numbers in JavaScript?
- What is NaN? How do you check if a value is NaN?
- What are Infinity and -Infinity in JavaScript?
- Difference between isNaN() and Number.isNaN()?
- How do parseInt() and parseFloat() work?
- What does the Number() constructor do?
- What does the toFixed() method do?
- What does the toPrecision() method do?

## 2. Conversion & Parsing

- How do you convert a string to a number in JavaScript?
- How do you convert a number to a string in JavaScript?
- What is the radix parameter in parseInt()?
- What is the output of parseInt("010") vs parseInt("010", 10)?
- What will parseInt("123abc") return?
- What will Number("123abc") return?
- What does +"123" do?
- Difference between Number(" ") and Number("")?

## 3. Special Values

- What is the result of NaN + 5?
- What is the result of Infinity + 1?
- What is the result of 1 / 0?

- What is the result of  $-1 / 0$ ?
- What is the result of  $0 / 0$ ?
- How does `isFinite()` work?

#### **4. Math Object**

- What does `Math.round()` do?
- Difference between `Math.floor()` and `Math.ceil()`?
- What does `Math.trunc()` do?
- How does `Math.random()` work?
- How do you generate a random integer between 1 and 100?
- How do `Math.max()` and `Math.min()` work?
- Usage of `Math.pow()` and `**` operator?
- What is the output of `Math.sqrt()`?

#### **5. Type Coercion & Edge Cases**

- What is the result of `"5" + 2`?
- What is the result of `"5" - 2`?
- What is the result of `"5" * 2`?
- What is the result of `"5" / 2`?
- What is the result of `true + 1`?
- What is the result of `null + 1`?
- What is the result of `undefined + 1`?
- What are the results of `Number(null)` and `Number(undefined)`?

#### **6. Floating Point Precision**

- Is `0.1 + 0.2 === 0.3` true or false? Why?
- How do you solve floating point precision issues in JS?
- What are the limitations of `toFixed()`?

#### **7. Output-Based Questions**

- What does `Number(" 42 ")` return?
- What does `parseInt("12.34")` return?
- What does `parseFloat("12.34abc")` return?
- What does `+"007"` return?
- What does `Number(true)` return?
- What does `Number(false)` return?
- What does `Number([])` return?
- What does `Number([1])` return?
- What does `Number([1,2,3])` return?
- What does `Number({})` return?

## 8. ES6+ Features / Extras

- Difference between `Number.isFinite()` and `isFinite()`?
- How does `Number.isInteger()` work?
- What is `Number.EPSILON`?
- What are `Number.MAX_VALUE` and `Number.MIN_VALUE`?
- What are `Number.MAX_SAFE_INTEGER` and `Number.MIN_SAFE_INTEGER`?
- What is `BigInt` and why was it introduced?

## 9. Practical Coding Questions

- Write a function to safely convert a string to an integer.
- Write a function to round a float to 2 decimal places.
- How do you generate a random number between 1 and 10?
- Write a program to check whether a number is positive, negative, or zero.
- Write a function to check whether a number is a safe integer.

## 10. Interview Discussion Questions

- What is implicit type conversion in JavaScript?
- Difference between `parseInt("abc")` and `Number("abc")`?

- Why is NaN called Not a Number? Is `NaN === NaN` true?
- How do you reliably check for NaN?
- When does Infinity occur?
- Why is radix important in number parsing?