

Introduction to Numbers

- JavaScript numbers are of type `number` , including integers and floating-point values.

Number Methods

1. **toFixed(digits)** – Formats a number to a fixed decimal places.
 - Example: `(5.678).toFixed(2) → '5.68'`
2. **toPrecision(precision)** – Formats a number to a specified length.
 - Example: `(123.456).toPrecision(4) → '123.5'`
3. **toString(base)** – Converts a number to a string in a given base (default is 10).
 - Example: `(255).toString(16) → 'ff'`
4. **toExponential(digits)** – Returns a number in exponential notation.
 - Example: `(12345).toExponential(2) → '1.23e+4'`
5. **parseInt(string, radix)** – Converts a string to an integer based on a given base.
 - Example: `parseInt('101', 2) → 5`
6. **parseFloat(string)** – Converts a string to a floating-point number.
 - Example: `parseFloat('3.14') → 3.14`
7. **isFinite(value)** – Checks if a value is a finite number.
 - Example: `isFinite(10 / 0) → false`
8. **isNaN(value)** – Checks if a value is `NaN` (Not a Number).
 - Example: `isNaN('abc' / 2) → true`
9. **Number.isInteger(value)** – Checks if a value is an integer.
 - Example: `Number.isInteger(4.2) → false`
10. **Number.MAX_VALUE** – Largest possible number in JavaScript.
 - Example: `Number.MAX_VALUE → 1.7976931348623157e+308`
11. **Number.MIN_VALUE** – Smallest positive number in JavaScript.
 - Example: `Number.MIN_VALUE → 5e-324`
12. **Number.POSITIVE_INFINITY** – Represents positive infinity.
 - Example: `1 / 0 → Infinity`
13. **Number.NEGATIVE_INFINITY** – Represents negative infinity.
 - Example: `-1 / 0 → -Infinity`
14. **Math.round(value)** – Rounds a number to the nearest integer.
 - Example: `Math.round(4.6) → 5`
15. **Math.floor(value)** – Rounds a number down.
 - Example: `Math.floor(4.9) → 4`
16. **Math.ceil(value)** – Rounds a number up.

- Example: `Math.ceil(4.1)` → 5

17. **Math.abs(value)** – Returns the absolute value.

- Example: `Math.abs(-10)` → 10

18. **Math.pow(base, exponent)** – Returns the power of a number.

- Example: `Math.pow(2, 3)` → 8

19. **Math.sqrt(value)** – Returns the square root.

- Example: `Math.sqrt(25)` → 5

20. **Math.cbrt(value)** – Returns the cube root.

- Example: `Math.cbrt(27)` → 3

21. **Math.max(a, b, ...)** – Returns the largest number.

- Example: `Math.max(10, 20, 5)` → 20

22. **Math.min(a, b, ...)** – Returns the smallest number.

- Example: `Math.min(10, 20, 5)` → 5

23. **Math.random()** – Returns a random number between 0 and 1 .

- Example: `Math.random()` → 0.5678 (random)