

## Question 1: What are the different types of operators in JavaScript? Explain with examples.

Operators are symbols that help us perform actions like adding numbers, comparing values, or assigning data.

JavaScript has **four main types** of operators:

### 1. Arithmetic Operators

Used for mathematical calculations.

Operator	Meaning	Example
+	Addition	$5 + 3 = 8$
-	Subtraction	$10 - 4 = 6$
*	Multiplication	$4 * 2 = 8$
/	Division	$20 / 4 = 5$
%	Remainder	$7 \% 3 = 1$

#### Example:

```
let a = 12;
```

```
let b = 4;
```

```
console.log(a + b); // 16
```

```
console.log(a % b); // 0
```

### 2. Assignment Operators

Used to assign values to variables.

#### Operator Meaning

= Assign value

+= Add and assign

-= Subtract and assign

**Example:**

```
let x = 10;  
x += 5;    // x = x + 5  
console.log(x); // 15
```

**3. Comparison Operators**

Used to compare two values. It returns **true** or **false**.

**Operator Meaning**

==	Equal to
===	Equal to (with type)
!=	Not equal
>	Greater than
<	Less than

**Example:**

```
console.log(10 > 3); // true  
console.log(5 == "5"); // true  
console.log(5 === "5"); // false
```

**4. Logical Operators**

Used to check multiple conditions.

**Operator Meaning**

&&	AND (both true)
	OR (one true)
!	NOT (opposite)

**Example:**

```
let age = 20;  
console.log(age > 18 && age < 30); // true
```

## Question 2: What is the difference between == and === in JavaScript?

### == (Double Equal)

- Compares **only values**
- Does *not* check the data type

Example:

```
5 == "5" // true
```

### === (Triple Equal)

- Compares **value + data type**
- More strict and safer

Example:

```
5 === "5" // false
```