



Java divides the into the following groups:

- Arithmetic operators
- Assignment operators
- Comparison operators
- Logical operators
- Bitwise operators

## Arithmetic Operators

Arithmetic operators are used to perform common mathematical operations.

Operator	Name	Description	Example	Try it
+	Addition	Adds together two values	x + y	<a href="#">Try it</a>
-	Subtraction	Subtracts one value from another	x - y	<a href="#">Try it</a>
*	Multiplication	Multiplies two values	x * y	<a href="#">Try it</a>
/	Division	Divides one value by another	x / y	<a href="#">Try it</a>
%	Modulus	Returns the division remainder	x % y	<a href="#">Try it</a>
++	Increment	Increases the value of a variable by 1	++x	<a href="#">Try it</a>
--	Decrement	Decreases the value of a variable by 1	--x	<a href="#">Try it</a>

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## Java Assignment Operators

Assignment operators are used to assign values to variables.

In the example below, we use the **assignment** operator (=) to assign the value **10** to a variable called **x**:

### Example

int x = 10;

[Try it yourself](#)

The **addition assignment** operator (+=) adds a value to a variable:

### Example

int x = 10; x = 5;

[Try it yourself](#)

A list of all assignment operators:

Operator	Example	Same As	Try it
=	x = 5	x = 5	<a href="#">Try it</a>
+=	x += 3	x = x + 3	<a href="#">Try it</a>
-=	x -= 3	x = x - 3	<a href="#">Try it</a>
*=	x *= 3	x = x * 3	<a href="#">Try it</a>
/=	x /= 3	x = x / 3	<a href="#">Try it</a>
%=	x %= 3	x = x % 3	<a href="#">Try it</a>
&=	x &= 3	x = x & 3	<a href="#">Try it</a>
=	x  = 3	x = x   3	<a href="#">Try it</a>
^=	x ^= 3	x = x ^ 3	<a href="#">Try it</a>
>=	x >= 3	x = x >= 3	<a href="#">Try it</a>
<=	x <= 3	x = x <= 3	<a href="#">Try it</a>

## Java Comparison Operators

Comparison operators are used to compare two values:

Operator	Name	Description	Example	Try it
==	Equal to	x == y	<a href="#">Try it</a>	
!=	Not equal	x != y	<a href="#">Try it</a>	
>	Greater than	x > y	<a href="#">Try it</a>	
<	Less than	x < y	<a href="#">Try it</a>	
>=	Greater than or equal to	x >= y	<a href="#">Try it</a>	
<=	Less than or equal to	x <= y	<a href="#">Try it</a>	

## Java Logical Operators

Logical operators are used to determine the logic between variables or values:

Operator	Name	Description	Example	Try it
&&	Logical and	Returns true if both statements are true	x < 5 && x < 10	<a href="#">Try it</a>
	Logical or	Returns true if one of the statements is true	x < 5    x < 4	<a href="#">Try it</a>
!	Logical not	Reverse the result, returns false if the result is true	!	<a href="#">Try it</a>

[Try it yourself](#)

Simple Truth Table:

a	b	a & b	a    b	!a
T	T	T	T	F
T	F	F	T	F
F	T	F	T	T
F	F	F	F	T

$n \neq 2 = 0$  User

$n \neq 2 = 1$  User

$n \neq 2 = 2$  User

$n \neq 2 = 3$  User

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$n \neq 2 = 5$  User

$n \neq 2 = 6$  User

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