

Java operator precedence

Note that this is a complete listing of operator precedence, and includes some operators which you have not yet seen in the lectures.

Precedence	Operator	Type	Associativity
15	() [] .	Parentheses Array subscript Member selection	Left to Right
14	++ --	Unary post-increment Unary post-decrement	Right to left
13	++ -- + - ! ~ (type)	Unary pre-increment Unary pre-decrement Unary plus Unary minus Unary logical negation Unary bitwise complement Unary type cast	Right to left
12	* / %	Multiplication Division Modulus	Left to right
11	+ -	Addition Subtraction	Left to right
10	<< >> >>>	Bitwise left shift Bitwise right shift with sign extension Bitwise right shift with zero extension	Left to right
9	< <= > >= instanceof	Relational less than Relational less than or equal Relational greater than Relational greater than or equal Type comparison (objects only)	Left to right
8	== !=	Relational is equal to Relational is not equal to	Left to right
7	&	Bitwise AND	Left to right
6	^	Bitwise exclusive OR	Left to right
5		Bitwise inclusive OR	Left to right
4	&&	Logical AND	Left to right
3		Logical OR	Left to right
2	? :	Ternary conditional	Right to left
1	= += -= *= /= % =	Assignment Addition assignment Subtraction assignment Multiplication assignment Division assignment Modulus assignment	Right to left