

Java Operator Precedence & Associativity Cheat Sheet

Level	Operators	Description	Associativity	Example
1	[] . ()	Array index, member access, method call	L → R	arr[i], obj.method()
2	++ -- (postfix)	Post-increment / post-decrement	L → R	x++, y--
3	++ -- + - ~ ! (prefix)	Pre-increment, unary plus/minus, bitwise NOT, logical NOT	R → L	++x, -y, !flag
4	(type)	Type casting	R → L	(int)3.14
5	* / %	Multiplication, division, modulus	L → R	a * b / c
6	+ -	Addition, subtraction	L → R	a + b - c
7	<< >> >>>	Shift operators	L → R	x << 2
8	< <= > >= instanceof	Relational, instanceof	L → R	a < b
9	== !=	Equality operators	L → R	a == b
10	&	Bitwise AND	L → R	a & b
11	^	Bitwise XOR	L → R	a ^ b
12		Bitwise OR	L → R	a b
13	&&	Logical AND	L → R	a && b
14		Logical OR	L → R	a b
15	?:	Ternary conditional	R → L	(a > b) ? a : b
16	= += -= *= /= %=	Assignment operators	R → L	a += b
17	,	Comma (expression separator)	L → R	(x = 1, y = 2)

Rules to Remember:

1. Parentheses override everything.
2. Postfix (++/--) happens after using the value.
3. Prefix (++/--) happens before using the value.
4. Most binary operators are Left → Right associative.
5. Assignments and ternary are Right → Left associative.