# Java Operator Precedence Table

| Precedence | Operator | Type | Associativity |
|---|---|---|---|
| 15 | ()<br>[]<br>· | Parentheses<br>Array subscript<br>Member selection | Left to Right |
| 14 | ++<br>-- | Unary post-increment<br>Unary post-decrement | Right to left |
| 13 | ++<br>--<br>+<br>-<br>!<br>~<br>( *type* ) | Unary pre-increment<br>Unary pre-decrement<br>Unary plus<br>Unary minus<br>Unary logical negation<br>Unary bitwise complement<br>Unary type cast | Right to left |
| 12 | *<br>/<br>% | Multiplication<br>Division<br>Modulus | Left to right |
| 11 | +<br>- | Addition<br>Subtraction | Left to right |
| 10 | <<<br>>><br>>>> | Bitwise left shift<br>Bitwise right shift with sign extension<br>Bitwise right shift with zero extension | Left to right |
| 9 | <<br><=<br>><br>>=<br>instanceof | Relational less than<br>Relational less than or equal<br>Relational greater than<br>Relational greater than or equal<br>Type comparison (objects only) | Left to right |
| 8 | ==<br>!= | Relational is equal to<br>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 | =<br>+=<br>-=<br>*=<br>/=<br>%= | Assignment<br>Addition assignment<br>Subtraction assignment<br>Multiplication assignment<br>Division assignment<br>Modulus assignment | Right to left |

*Larger number means higher precedence.*