

**Expression:** An expression is a combination of **operands** (variables and literals) and **operators**, written according to the syntax of java programming language. every expression results in some value of a certain type that can be assigned to a variable (output operand).

In Java programming language expression evaluation is mainly depends on priority and associativity.

**Priority:** This represents the evaluation of expression starts from "what" operator.

**Associativity:** It represents which operator should be evaluated first if an expression is containing more than one operator with same priority.

Operator	Priority	Associativity
{}, (), []	1	Left to right
++, --, !	2	Right to left
*, /, %	3	Right to Left
+, -	4	Left to right
<, <=, >, >=, ==, !=	5	Left to right
&&	6	Left to right
	7	Left to right
?:	8	Right to left
=, +=, -=, *=, /=, %=	9	Right to left

Example 1:

$$10 - 3 \% 8 + 6 / 4$$

$$10 - 3 + 6 / 4$$

$$10 - 3 + 1$$

$$7 + 1$$

**8**

Example 2:

$$17 - 8 / 4 * 2 + 3 - ++a$$

$$17 - 8 / 4 * 2 + 3 - 6$$

$$17 - 2 * 2 + 3 - 6$$

$$17 - 4 + 3 - 6$$

$$13 + 4 - 6$$

$$16 - 6$$

**10**