

Operator	Description	Associativity
• () [] ++ --	- Member Selection - Method call - Array element reference - Increment - Decrement	Left to Right
! (type)	- Not - Casting	Right to Left
* / %	- Multiplication - Division - Modulus	Left to right

$+$ $-$	Addition Subtraction	Left to right
$<$ $<=$ $>$ $>=$	Less than Less than equals to Greater than Greater than equals to	Left to right
$=$ $\neq$	Equality Inequality	Left to right
$\&\&$ $\ \ $	AND OR	Left to right

$==$
 $!=$

Equality

Inequality

Left to right

$\&\&$

AND

$\|\$

OR

$?:$

Conditional

Left to right

$=$

Assignment

$+=, *=, -=, /=,$
 $\% =$

Shorthand

Right to left

$\text{Sopln}(2 + 3.0f + 5.11);$

↑
int

↓
float

↳ double

byte a = 0

char ch = 'A';

$\text{Sopln}(a + ch);$ → 65

↓
65

*Expression → It is a valid combination of operators & operands.

Eg:- $25 + 6 \% 2 - 3$

* Unary operators :- which work on one operand
Eg:- $++$, $--$, etc.

Prefix unary operators

(Change & Use)

$++a$, $--b$.

Postfix Unary operators.

(Use and change)

$a++$, $b--$.

Q Solve the following and write output

(1) `int a = 10; 11 10 9`
`int x;`

$$x = a++ \text{ } \oplus \text{ } a-- \text{ } \oplus \text{ } --a;$$
$$10 + 11 + 9$$
$$= \textcircled{30}$$

(2) `int x = 25; 26 25 24`
`int a;`

$$a = ++x + --x \% x + --x$$
$$26 + \underbrace{25 \% 25}_{0} + 24$$
$$26 + 24$$
$$= \textcircled{50}$$

(3) $\text{int } x = 2; \text{ } \cancel{3} \cancel{2} \cancel{3} 2$

$x * = ++x - --x / x++ \% --x ;$

$3 - 2 / 2 \% 2$

$3 - 1 \% 2$

$3 - 1$
 $\textcircled{2} * \textcircled{2} = \textcircled{4}$

$$\begin{array}{r} 0 \\ 2 \overline{) 1} \\ \underline{- 0} \\ 1 \end{array}$$

$$x * = a$$

$$x = \textcircled{x} * a$$
