

Java Lesson Notes

Week-7

The Arithmetic Operators

The Arithmetic Operators

Arithmetic operators are used in mathematical expressions in the same way that they are used in algebra.

Assume integer variable A holds 10 and variable B holds 20, then –

Operator	Description	Example
+ (Addition)	Adds values on either side of the operator.	A + B will give 30
- (Subtraction)	Subtracts right-hand operand from left-hand operand.	A - B will give -10
* (Multiplication)	Multiplies values on either side of the operator.	A * B will give 200
/ (Division)	Divides left-hand operand by right-hand operand.	B / A will give 2
% (Modulus)	Divides left-hand operand by right-hand operand and returns remainder.	B % A will give 0
++ (Increment)	Increases the value of operand by 1.	B++ gives 21
-- (Decrement)	Decreases the value of operand by 1.	B-- gives 19


Example

```
public class Test {  
  
    public static void main(String args[]) {  
        int a = 10;  
        int b = 20;  
        int c = 25;  
        int d = 25;  
  
        System.out.println("a + b = " + (a + b) );  
        System.out.println("a - b = " + (a - b) );  
        System.out.println("a * b = " + (a * b) );  
        System.out.println("b / a = " + (b / a) );  
        System.out.println("b % a = " + (b % a) );  
        System.out.println("c % a = " + (c % a) );  
        System.out.println("a++    = " + (a++) );  
        System.out.println("b--    = " + (a--) );  
  
        // Check the difference in d++ and ++d  
        System.out.println("d++    = " + (d++) );  
        System.out.println("++d    = " + (++d) );  
    }  
}
```

Example

This will produce the following result –

Output



```
a + b = 30  
a - b = -10  
a * b = 200  
b / a = 2  
b % a = 0  
c % a = 5  
a++   = 10  
b--   = 11  
d++   = 25  
++d   = 27
```