

Key point: *The increment operator (++) and decrement operator (--) are for incrementing and decrementing a variable by 1.*

- Post increment and post decrement

`int i = 3, j = 3;`

`i++;` //i becomes 4
`j--;` //j becomes 2

`int k = i++;` //is equivalent to

`int k = i;`
`i = i + 1;` //For example, if i=3, then k=3 after which i is incremented to 4.

- Pre-increment and pre-decrement

`int i = 3, j = 3;`

`++i;` //i becomes 4
`--j;` //j becomes 2

`int k=++i;` //is equivalent to

`i = i + 1;`
`int k = i;` //For example, if i=3, then i is incremented to 4 and assigned to k, //making k=4.

Table 2.5 Increment and Decrement Operators

Operator	Name	Description	Example (assume i=1)
<code>++var</code>	preincrement	Increment <code>var</code> by 1, and use the new <code>var</code> value in the statement	<code>int j = ++i;</code> //j is 2, i is 2
<code>var++</code>	postincrement	Increment <code>var</code> by 1, but use the original <code>var</code> value in the statement	<code>int j = i++;</code> //j is 1, i is 2
<code>--var</code>	predecrement	Decrement <code>var</code> by 1, and use the new <code>var</code> value in the statement	<code>int j = --i;</code> //j is 0, i is 0
<code>var--</code>	postdecrement	Decrement <code>var</code> by 1, but use the original <code>var</code> value in the statement	<code>int j = i--;</code> //j is 1, i is 0

```
int i = 10;  
int newNum = 10 * (++i); //Equivalent to i = i + 1; int newNum = 10 * i;  
System.out.print("i is " + i + ", newNum is " + newNum);
```

i is 11, newNum is 100

```
int i = 10;  
int newNum = 10 * (++i); //Equivalent to int newNum = 10 * i; i = i + 1;  
System.out.print("i is " + i + ", newNum is " + newNum);
```

i is 11, newNum is 110