

More Operators

Math Operators

You've already seen the basic mathematical operators (+, -, *, /, %), but there are a few more operators that make doing math in PHP easier.

Use Cases

Say you have an number and you want to add to it:

```
$a = 25;
```

```
$a = $a + 5;
```

This example takes the value of `$a` and adds 5 to it. This is something you will likely do a lot in PHP, so there are some convenience operators that make the task even easier.

`+=` Add To Initial Value

This operator adds a value to a variable:

```
$a = 25;
```

```
$a = $a + 5; // 30
```

```
$a += 5;      // 35
```

These 2 lines do the exact same thing, add 5 to the value of the variable, and assign the new value to the variable.

`-=` Subtract From Initial Value

This operator subtracts a value to a variable:

```
$a = 25;
```

```
$a = $a - 5; // 20
```

```
$a -= 5;      // 15
```

`*=` Multiply The Initial Value

This operator multiplies the value of a variable:

```
$a = 10;
```

```
$a = $a * 10; // 100
```

```
$a *= 10;     // 1000
```

/= Divide The Initial Value

This operator divides the value of a variable:

```
$a = 1000;
```

```
$a = $a / 10; // 100
```

```
$a /= 10;     // 10
```

. = Concatenate Onto A String

This operator concatenates a string onto the end of another string:

```
$x = 'a';
```

```
$x = $x . 'b'; // ab
```

```
$x .= 'c';      // abc
```


++ Increment

Incrementing means 'add one to the existing value'

```
$x = 1;
```

```
$x = $x + 1; // 2
```

```
$x++;      // 3
```

-- Decrement

Decrementing means 'subtract one from the existing value'

```
$x = 3;
```

```
$x = $x - 1;    // 2
```

```
$x--;          // 1
```