

Arithmetic Operators	2
What is an arithmetic operator?	2
Addition	2
Subtraction	2
Multiplication	4
Division	4
Modulo	5
Easier way to write operations	5
Increment	6

Arithmetic Operators

What is an arithmetic operator?

Arithmetic operators are used to perform arithmetic operations on numeric data.

Addition

In PHP, the plus symbol `+` is used for addition.
A simple example:

```
<? Php
    $total = 10 + 2;
    echo $total;
?>
```

Here, we create a *\$total* variable that will contain the result of an addition. Then we display the result (here 12).

To add the variable content, simply separate each variable name with a plus symbol. Try this new script:

```
<? Php
    $my_number1 = 10;
    $my_number2 = 2;

    $total = $my_number1 + $my_number2;

    echo $total;
?>
```

In this script, we added 2 variables that both contain a number. A 3rd variable is declared *\$total*. This variable will contain the result of adding the first two variables.

Thanks to the symbol `+`, PHP will add the two values.

Subtraction

In PHP, the minus symbol - is used for subtraction.
We use the same example as for the addition:

```
<? Php
    $my_number1 = 10;
    $my_number2 = 2;

    $total = $my_number1 - $my_number2;

    echo $total;
?>
```

Here, the result will be 8.
We can also mix subtraction and addition:

```
<? Php
    $my_number1 = 10;
    $my_number2 = 2;
    $my_number3 = 5;

    $total = $my_number1 - $my_number2 +
              $my_number3;

    echo $total;
?>
```

You can also use parentheses in your additions / subtractions or any other arithmetic operation.

```
$total = ($my_number1 - $my_number2) +
          $my_number3; // Returns 13
$total = $my_number1 - ($my_number2 +
          $my_number3); // Return 3
```

Multiplication

In PHP, the Asterixsymbol * is used for subtraction.

For example:

```
<? Php
    $my_number1 = 10;
    $my_number2 = 2;

    $total = $my_number1 * $my_number2;

    echo $total; // Return 20
?>
```

Division

In PHP, to divide a number by another, use the symbol /:

```
<? Php
    $my_number1 = 10;
    $my_number2 = 2;

    $total = $my_number1 / $my_number2;
    echo $total; // Return 5
?>
```

Modulo

The rest of a division is called the modulo.

For example, when we divide 10 by 2, the rest of the division is 0.

The result of 10 modulo 2 is therefore 0.

When we divide 10 by 3, $3 * 3 = 9$ and the rest of the division is 1.

The result of 10 modulo 3 is 1.

In PHP, to get the modulo, use the symbol%:

```
<? php
    $my_number1 = 10;
    $my_number2 = 2;

    $total = $my_number1% $my_number2;
    echo $total; // Returns 0
?>
```

Easier way to write operations

In PHP, it's possible to write those operations in a easy way :

```
<?php
    $x = 5;
    //Those two lines are equivalent:
    $x = $x + 2;
    $x += 2;

    // It works on subtract/divide/multiply
    $x -= 2;
    $x /= 2;
    $x *=2;
```

Increment

In PHP, you can increment a variable in a easy way :

<?php

// Those three lines are equivalent :

\$x+=1;

\$x++;

++\$x;

// You can do the opposite by typing :

\$x--;