

## Boolean variables

Boolean variables contain only TRUE or FALSE as values.

```
$var = TRUE;
```

This is boolean variable. TRUE or FALSE should not be in quotes. Then it will be considered as strings.

## Arithmetic Operations

It usually includes addition, subtraction, multiplication, division, modulus which gives the remainder of the division and exponentiation.

Example Name	Result
<code>\$a + \$b</code> Addition	Sum of \$a and \$b
<code>\$a - \$b</code> Subtraction	Difference of \$a and \$b
<code>\$a * \$b</code> Multiplication	Product of \$a and \$b
<code>\$a / \$b</code> Division	Quotient of \$a and \$b
<code>\$a % \$b</code> Modulo	Remainder of \$a divided by \$b
<code>\$a ** \$b</code> Exponentiation	Result of raising \$a to the \$b th power. Introduced in PHP 5.6

## Logical Operations

Logical operators, Relational operators are used for comparisons. These are the valid operators for PHP. These operations either evaluate to TRUE or a FALSE state.

Example Name	Result
<code>\$a and \$b</code> And	TRUE if both \$a and \$b are TRUE, FALSE otherwise
<code>\$a    \$b</code> Or	TRUE if either \$a or \$b is TRUE. If \$a is TRUE and \$b is false then also this condition will output true as one of the two options or both the option should be true in OR case
<code>\$a xor \$b</code> Xor	TRUE if either \$a or \$b is TRUE, but not both; otherwise FALSE
<code>! \$a</code> Not	TRUE if \$a is not TRUE, otherwise FALSE

Example Name	Result
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$\$a \% \$b$	Modulo Remainder of \$a divided by \$b
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