

PHP - Operators

A full list of PHP operators follows in the section Operator Precedence. The section also explains operator precedence and associativity, which govern exactly how expressions containing several different operators are evaluated.php operators can be classified into the following three categories:

Unary Operators

1. Negation Operators
2. Increment & Decrement Operators
3. Cast Operators

Binary Operators

1. Arithmetic Operators
2. Assignment Operators
3. Concatenation Operators
4. Comparison Operators
5. Logical Operators
6. Bitwise Operators

Ternary Operators

1. Condition Operators

Unary Operators

As unary operations have only one operand they are evaluated before other operations containing them in php,here is an example and list of unary operators in php using negation.

Negation Operators

Operators	Meaning	Example	Result
!	Logical Negation	<code>\$x=2,!(\$x==2)</code>	True
~	Bitwise Negation	<code>\$x=2,\$y=~\$x</code>	<code>\$y=-3</code>

Increment & Decrement Operators

Operators	Meaning	Example	Result
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Operators	Meaning	Example	Result
$x++$	Post Increment	$x=2, y=x++$	$x=3, y=2$
$++x$	Pre Increment	$x=2, y=++x$	$x=3, y=3$
$x--$	Post Decrement	$x=2, y=x--$	$x=1, y=2$
$--x$	Pre Decrement	$x=2, y=--x$	$x=1, y=1$

Cast Operators

Operators	Meaning	Example	Result
int	Integer	$n=(int)12.24$	$n=12$

Binary Operators

In php, a binary operation on a set is a calculation that combines two elements of the set (called operands) to produce another element of the set (more formally, an operation whose arity is two, and whose two domains and one codomain are (subsets of) the same set). Examples include the familiar elementary arithmetic operations of addition, subtraction, multiplication and division.

Arithmetic Operators

Operators	Meaning	Example	Result
+	Addition	$x=2, y=2 - x+y$	4
-	Subtraction	$x=2, y=2 - x-y$	0
*	Multiplication	$x=2, y=2 - x*y$	4
/	Division	$x=2, y=2 - x/y$	1
%	Modulus	$x=2, y=2 - x\%y$	0

Assignment Operators

Operators	Meaning	Example	Result
=	Equals to	$y=2, x=y$	$x=2$
+=	Plus Equals to	$x=10, y=2 - x+=y$	$x=12$
-=	Minus Equals to	$x=10, y=2 - x-=y$	$x=8$
=	Multiply Equals to	$x=10, y=2 - x=y$	$x=20$
/=	Divide Equals to	$x=10, y=2 - x/=y$	5
.=	Dot Equals to	$x=10, y=2 - x.=y$	$x=102$
%=	Modulus Equals to	$x=10, y=2 - x\%=y$	0

Concatenation Operators

Operators	Meaning	Example	Result
.(Dot)	Concatenation	"tutorials"."studio"	tutorialstudio

Comparison Operators

Operators	Meaning	Example	Result
==	Is Equals to	$\$x=1,\$y=2 - \$x==\y	False
!=	Is not Equals to	$\$x=1,\$y=2 - \$x!=\y	True
<	Is Less Than	$\$x=2,\$y=1 - \$x<\y	False
<=	Less Than or Equals to	$\$x=2,\$y=2 - \$x<=\y	True
>	Is Greater Than	$\$x=1,\$y=2 - \$x>\y	False
>=	Is Greater Than or Equals to	$\$x=2,\$y=2 - \$x>=\y	True
===	Is Identical to	$\$x=1,\$y="1" - \$x===\y	False
!==	Is Not Identical to	$\$x=1,\$y="1" - \$x!==\y	True

Logical Operators

Operators	Meaning	Example	Result
&&,and	And	$\$x=15,\$y=10,\$z=20 - \$x>\$y \text{ and } \$x<\$z$	True
,or	Or	$\$x=5,\$y=10,\$z=20 - \$x>\$y \text{ or } \$x<\$z$	True

Bitwise Operators

Operators	Meaning	Example	Result
&	Bitwise AND	$\$x=12,\$y=9 - \$z=\$x \& \$y$	$\$z=8$
	Bitwise OR	$\$x=12,\$y=9 - \$z=\$x \$y$	$\$z=13$
^	Bitwise XOR	$\$x=12,\$y=9 - \$z=\$x \wedge \$y$	$\$z=5$
<<	Bitwise Shift Left	$\$x=12,\$y=9 - \$z=\$x \ll \$y$	$\$z=48$
>>	Bitwise Shift Right	$\$x=12,\$y=2 - \$z=\$x \gg \$y$	$\$z=3$

Ternary Operators

In php, ?: is a ternary operator that is part of the syntax for a basic conditional expression in several programming languages. It is commonly referred to as the conditional operator, inline if (iif), or ternary if.

Condition (?)

Operators	Meaning	Example	Result
?True:False	Ternary Conditional	$\$x=15 \$a=(\$x<=10)?"x \text{ is } <=10":"x \text{ is } >=10"$	$x \text{ is } > 15$