

What are PHP Operators?

Operators are symbols used to perform operations on variables and values.

Types of PHP Operators

1. Arithmetic Operators
2. Assignment Operators
3. Comparison Operators
4. Logical Operators
5. Increment / Decrement Operators
6. String Operators
7. Conditional (Ternary) Operator

1. Arithmetic Operators

Used for mathematical calculations.

Operator	Meaning	Example
----------	---------	---------

+	Addition	$\$a + \b
---	----------	-------------

-	Subtraction	$\$a - \b
---	-------------	-------------

*	Multiplication	$\$a * \b
---	----------------	-------------

/	Division	$\$a / \b
---	----------	-------------

%	Modulus	$\$a \% \b
---	---------	--------------

Example:

```
<?php  
$a = 10;  
$b = 3;
```

```
echo $a + $b; // 13  
?>
```

2. Assignment Operators

Used to assign values.

Operator Example Meaning

=	\$a = 5	Assign
+=	\$a += 2	\$a = \$a + 2
-=	\$a -= 2	\$a = \$a - 2
*=	\$a *= 2	\$a = \$a * 2
/=	\$a /= 2	\$a = \$a / 2

3. Comparison Operators

Used to compare two values.

Operator Meaning

==	Equal
==	Identical (value + type)
!=	Not equal
>	Greater than
<	Less than
>=	Greater than or equal

Operator	Meaning
-----------------	----------------

<= Less than or equal

Example:

```
<?php
$x = 10;
$y = "10";

var_dump($x == $y); // true
var_dump($x === $y); // false
?>
```

4. Logical Operators

Used with conditions.

Operator	Meaning
-----------------	----------------

&& AND

\

! NOT

Example:

```
<?php
$age = 20;

if($age >= 18 && $age <= 60) {
    echo "Eligible";
}
?>
```

5. Increment / Decrement Operators

Operator	Meaning
-----------------	----------------

Operator Meaning

`++$a` Pre-increment

`$a++` Post-increment

`--$a` Pre-decrement

`$a--` Post-decrement

6. String Operators

Operator Meaning

`.` Concatenation

`.=` Append

Example:

```
<?php
$fname = "Chitu";
$lname = "Bytes";

echo $fname . " " . $lname;
?>
```

7. Conditional (Ternary) Operator

Shortcut for if-else.

```
<?php
$age = 17;

$result = ($age >= 18) ? "Adult" : "Minor";
echo $result;
?>
```