

CONSTRAINTS

Constants are like variables except that once they are defined they cannot be changed or undefined.

PHP's magic constants	
Name	Description
<code>__LINE__</code>	The current line number of the file.
<code>__FILE__</code>	The full path and filename of the file .
<code>__DIR__</code>	The directory of the file. If used inside an include, the directory of the included file is returned.
<code>__FUNCTION__</code>	The function name.
<code>__CLASS__</code>	The class name.
<code>__METHOD__</code>	The class method name.
<code>__NAMESPACE__</code>	The name of the current namespace.

Code:

```
<?php
echo __LINE__;
?>
```

Math's Functions

1. Minimum

The min() function returns the lowest value in an array, or the lowest value of several specified values.

```
<?php
echo(min(2,4,6,8,10) . "<br>");
echo(min(22,14,68,18,15) . "<br>");
echo(min(array(4,6,8,10)) . "<br>");
echo(min(array(44,16,81,12)));
?>
```

2. Maximum

The max() function returns the highest value in an array, or the highest value of several specified values.

```
<?php
echo(max(2,4,6,8,10) . "<br>");
echo(max(22,14,68,18,15) . "<br>");
echo(max(array(4,6,8,10)) . "<br>");
echo(max(array(44,16,81,12)));
?>
```

3. SquareRoot

```
<?php
echo(sqrt(0) . "<br>");
echo(sqrt(1) . "<br>");
echo(sqrt(9) . "<br>");
echo(sqrt(0.64) . "<br>");
echo(sqrt(-9));
?>
```

4. Random Number

```
<?php
echo(rand() . "<br>");
echo(rand() . "<br>");
echo(rand(10,100));
?>
```

PHP Typecasting for Different Datatype

```
<?php
$count = 5;

$count = (string) $count;

$count = (float) $count;

$count = (boolean) $count;

$count = (array) $count;

$count = (object) $count;

?>
```

Regular Expression Functions

Function	Description
preg_match()	Returns 1 if the pattern was found in the string and 0 if not
preg_match_all ()	Returns the number of times the pattern was found in the string, which may also be 0
preg_replace()	Returns a new string where matched patterns have been replaced with another string

1. The `preg_match()` function will tell you whether a string contains matches of a pattern.

```
<?php
$str = "demo";
$pattern = "Pattern khud bnana hai 😊 ";
echo preg_match($pattern, $str); ?>
```

2. The `preg_match_all()` function will tell you how many matches were found for a pattern in a string.

```
<?php
$str = "The rain in SPAIN falls mainly on the plains.";
$pattern = " Pattern khud bnana hai 😊 ";
echo preg_match_all($pattern, $str); // Outputs 4
?>
```

3. The `preg_match_all()` function will tell you how many matches were found for a pattern in a string.

```
<?php
$str = "The rain in SPAIN falls mainly on the plains.";
$pattern = " Pattern khud bnana hai 😊 ";
echo preg_match_all($pattern, $str); // Outputs 4
?>
```

4. The `preg_replace()` function will replace all of the matches of the pattern in a string with another string.

```
<?php
$str = "Visit Microsoft!";
$pattern = " Pattern khud bnana hai 😊 ";
echo preg_replace($pattern, "demo", $str); ?>
```

Array Functions

Syntax to create PHP indexed arrays:

```
$a = array(value1, value2, value3, ...)
```

Syntax to create PHP associative arrays:

```
$a = array(key1 => value1, key2 => value2...)
```

Function	Description
array()	Creates an array
array_change_key_case()	Changes all keys in an array to lowercase or uppercase
array_chunk()	Splits an array into chunks of arrays
array_column()	Returns the values from a single column in the input array
array_combine()	Creates an array by using the elements from one "keys" array and one "values" array
array_count_values()	Counts all the values of an array
array_diff()	Compare arrays, and returns the differences (compare values only)
array_diff_assoc()	Compare arrays, and returns the differences (compare keys and values)
array_diff_key()	Compare arrays, and returns the differences (compare keys only)
array_diff_uassoc()	Compare arrays, and returns the differences (compare keys and values, using a user-defined key comparison function)
array_diff_ukey()	Compare arrays, and returns the differences (compare keys only, using a user-defined key comparison function)
array_fill()	Fills an array with values
array_fill_keys()	Fills an array with values, specifying keys
array_filter()	Filters the values of an array using a callback function
array_flip()	Flips/Exchanges all keys with their associated values in an array
array_intersect()	Compare arrays, and returns the matches (compare values only)
array_intersect_assoc()	Compare arrays and returns the matches (compare keys and values)
array_intersect_key()	Compare arrays, and returns the matches (compare keys only)
array_intersect_uassoc()	Compare arrays, and returns the matches (compare keys and values, using a user-defined key comparison function)
array_intersect_ukey()	Compare arrays, and returns the matches (compare keys only, using a user-defined key comparison function)
array_key_exists()	Checks if the specified key exists in the array
array_keys()	Returns all the keys of an array
array_map()	Sends each value of an array to a user-made function, which returns new values
array_merge()	Merges one or more arrays into one array

array_merge_recursive()	Merges one or more arrays into one array recursively
array_multisort()	Sorts multiple or multi-dimensional arrays
array_pad()	Inserts a specified number of items, with a specified value, to an array
array_pop()	Deletes the last element of an array
array_product()	Calculates the product of the values in an array
array_push()	Inserts one or more elements to the end of an array
array_rand()	Returns one or more random keys from an array
array_reduce()	Returns an array as a string, using a user-defined function
array_replace()	Replaces the values of the first array with the values from following arrays
array_replace_recursive()	Replaces the values of the first array with the values from following arrays recursively
array_reverse()	Returns an array in the reverse order
array_search()	Searches an array for a given value and returns the key
array_shift()	Removes the first element from an array, and returns the value of the removed element
array_slice()	Returns selected parts of an array
array_splice()	Removes and replaces specified elements of an array
array_sum()	Returns the sum of the values in an array