1. Prime Number:

```
<?php
function isPrime($num) {
    if ($num < 2) {
        return false;
    }
    for ($i = 2; $i <= sqrt($num); $i++) {
        if ($num % $i == 0) {
            return false;
        }
    }
    return true;
}
snumber = 17; // Change this to the desired number
if (isPrime($number)) {
        echo "$number is a prime number.";
} else {
        echo "$number is not a prime number.";
}
?>
```

Output -

17 is a prime number.

2. Factorial:

```
<?php
function factorial($n) {
    if ($n == 0 || $n == 1) {
        return 1;
    } else {
        return $n * factorial($n - 1);
    }
}
$number = 5; // Change this to the desired number
echo "Factorial of $number is: " . factorial($number);
?>
```

Output -

Factorial of 5 is: 120

3. Number Triangle:

```
<?php
$rows = 5; // Change this to the desired number of rows
for ($i = 1; $i <= $rows; $i++) {
    for ($j = 1; $j <= $i; $j++) {
        echo $j . " ";
    }
    echo "<br>?>
```

Output -

```
1
12
123
1234
12345
```

4. Grade Display:

```
<?php
phy = 90;
chem = 80;
\$math = 90;
$total = $phy + $chem + $math;
per = stotal / 3;
echo "Physics Marks Is $phy <br>";
echo "Chemistry Marks Is $chem <br>";
echo "Maths Marks Is $math <br>";
echo "Total Is $total Percentage Is $per <br>";
if ($per >= 70) {
   echo "Congratulation";
   echo "<br > You Get Distinction";
} elseif ($per >= 60) {
   echo "First Class";
} elseif ($per >= 40) {
   echo "Pass Class";
} else {
    echo "You Are Failed";
```

Output -

Congratulations

You Get Distinction

5. String Functions:

```
<?php
$string = "Hello, World!";

// Example string functions
echo "Length of the string: " . strlen($string) . "<br>;
echo "Uppercase: " . strtoupper($string) . "<br>;
echo "Lowercase: " . strtolower($string) . "<br>;
echo "Substring: " . substr($string, 0, 5) . "<br>;
echo "Position of 'World': " . strpos($string, "World") .
"<br>;
?>
```

Output -

Length of the string: 13

Uppercase: HELLO, WORLD! Lowercase: hello, world!

Substring: Hello

Position of 'World': 7

6. OOP in PHP:

```
<?php
class Books
{
    public function name()
    {
        echo " Book Name : - Propal Book <br>";
    }
    public function price()
    {
        echo "Price : - 90.Rs";
    }
}
$obj = new Books();
$obj->name();
$obj->price();
?>
    Output \(\rightarrow\) Book Name:- Propal Book
```