

1.sum of 2 numbers

```
<?php
```

```
$num1 = 10;
```

```
$num2 = 20;
```

```
$sum = $num1 + $num2;
```

```
echo "The sum of $num1 and $num2 is: $sum";
```

```
?>
```

2.area of the rectangle

```
<?php
```

```
$width = 10;
```

```
$height = 20;
```

```
$area = $width * $height;
```

```
echo "The area of the rectangle is: $area";
```

```
?>
```

3.area of a circle

```
<?php
```

```
$radius = 10;
```

```
$pi = 3.14159265;
```

```
$area = $pi * $radius * $radius;
```

```
echo "The area of the circle is: " . round($area, 2);
```

```
?>
```

4. volume of the sphere

```
<?php
$radius = 10;
$pi = 3.14159265;
$volume = (4/3) * $pi * $radius * $radius * $radius;

echo "The volume of the sphere is: " . round($volume, 2);

?>
```

5. check odd or even

```
<?php
$num = 10;

if ($num % 2 == 0) {
    echo "$num is an even number.";
} else {
    echo "$num is an odd number.";
}

?>
```

6. check whether positive negative or zero

```
<?php
$num = 10;

if ($num > 0) {
    echo "$num is a positive number.";
}
```

```
} elseif ($num < 0) {  
    echo "$num is a negative number.";  
} else {  
    echo "$num is zero.";  
}  
?>
```

7. greater among 2 numbers

```
<?php  
$num1 = 10;  
$num2 = 20;  
  
if ($num1 > $num2) {  
    echo "$num1 is greater than $num2.";  
} else {  
    echo "$num2 is greater than $num1.";  
}  
?>
```

8. smallest among 3 numbers

```
<?php  
$num1 = 10;  
$num2 = 20;  
$num3 = 5;  
  
if ($num1 <= $num2 && $num1 <= $num3) {
```

```

    echo "$num1 is the smallest number.";
} elseif ($num2 <= $num1 && $num2 <= $num3) {
    echo "$num2 is the smallest number.";
} else {
    echo "$num3 is the smallest number.";
}
?>

```

9. check palindrome number or not

```

<?php
$num = 121;
$original_num = $num;
$reverse = 0;

while ($num > 0) {
    $remainder = $num % 10;
    $reverse = ($reverse * 10) + $remainder;
    $num = (int)($num / 10);
}

if ($original_num == $reverse) {
    echo "$original_num is a palindrome number.";
} else {
    echo "$original_num is not a palindrome number.";
}
?>

```

10. check Armstrong number or not

```

<?php

$num = 153;

$original_num = $num;

$sum = 0;

$digits = 0;

while ($num > 0) {

    $digits++;

    $num = (int)($num / 10);

}

$num = $original_num;

while ($num > 0) {

    $remainder = $num % 10;

    $sum = $sum + pow($remainder, $digits);

    $num = (int)($num / 10);

}

if ($original_num == $sum) {

    echo "$original_num is an Armstrong number.";

} else {

    echo "$original_num is not an Armstrong number.";

}

?>

```

11. check prime or composite

```

<?php
$num = 7;
$is_prime = true;

if ($num <= 1) {
    $is_prime = false;
} else {
    for ($i = 2; $i <= sqrt($num); $i++) {
        if ($num % $i == 0) {
            $is_prime = false;
            break;
        }
    }
}

if ($is_prime) {
    echo "$num is a prime number.";
} else {
    echo "$num is a composite number.";
}
?>

```

12. to find the factors of a number

```

<?php
$num = 24;
echo "The factors of $num are: ";
for ($i = 1; $i <= $num; $i++) {
    if ($num % $i == 0) {

```

```
    echo "$i ";  
}  
}  
?>
```

13. to find the factorial of a number

```
<?php  
$num = 5;  
$factorial = 1;  
for ($i = 1; $i <= $num; $i++) {  
    $factorial = $factorial * $i;  
}  
echo "The factorial of $num is $factorial."  
?>
```

14. to find the multiplication table of a number

```
<?php  
$num = 7;  
echo "The multiplication table of $num is:<br>";  
for ($i = 1; $i <= 10; $i++) {  
    echo "$num x $i = " . ($num * $i) . "<br>";  
}  
?>
```

15. sum of N natural numbers

```
<?php
```

```

$n = 10;
$sum = 0;
for ($i = 1; $i <= $n; $i++) {
    $sum = $sum + $i;
}
echo "The sum of first $n natural numbers is $sum.";
?>

```

16. to print 1 to 100 using for loop, while loop and do while loop

```

<?php
// Using while loop
echo "Using while loop:<br>";
$i = 1;
while ($i <= 100) {
    echo $i . " ";
    $i++;
}

// Using do...while loop
echo "<br><br>Using do...while loop:<br>";
$i = 1;
do {
    echo $i . " ";
    $i++;
} while ($i <= 100);

// Using for loop
echo "<br><br>Using for loop:<br>";

```



```
for ($i = 1; $i <= 100; $i++) {  
    echo $i . " ";  
}  
?>
```

17. to print the day of the week using switch case

```
<?php  
$day = 4;  
  
switch ($day) {  
    case 1:  
        echo "Monday";  
        break;  
    case 2:  
        echo "Tuesday";  
        break;  
    case 3:  
        echo "Wednesday";  
        break;  
    case 4:  
        echo "Thursday";  
        break;  
    case 5:  
        echo "Friday";  
        break;  
    case 6:  
        echo "Saturday";  
        break;
```

```
case 7:
    echo "Sunday";
    break;
default:
    echo "Invalid day";
    break;
}
?>
```

18. ternary operator

```
<?php
$number = 5;

$result = ($number > 0) ? "positive" : "negative";

echo "The number is " . $result;
?>
```