<http://www.w3resource.com/php-exercises/php-math-exercises.php>

<http://phpfiddle.org/>

<?php

// -------------- Exercise: round up numbers ---------------

// Write a PHP script which round the following values with 1 decimal digit precision.

$a = 1.65;

$b = 1.65;

$c = -1.54;

**echo** "-------------- Exercise: round up numbers ---------------";

**echo** "<br>NUMBER FORMAT: ".**number\_format**((**float**)$a,1,'.','')."<br>"; // 1.7

**echo** "NUMBER FORMAT: ".**number\_format**((**float**)$c,1,'.','')."<br>"; // -1.5

**echo** "PHP ROUND HALF UP: ".**round**( $a, 1, **PHP\_ROUND\_HALF\_UP**).'<br>'; // 1.7

**echo** "PHP ROUND HALF DOWN: ".**round**( $b, 1, **PHP\_ROUND\_HALF\_DOWN**).'<br>'; //1.6

**echo** "PHP ROUND HALF EVEN: ". **round**( $c, 1, **PHP\_ROUND\_HALF\_EVEN**); // -1.5

// -------------- Exercise: min and max value ---------------

// Write a PHP script to find the maximum and minimum marks from the following set of arrays.

$marks1 = **array**(360,310,310,330,313,375,456,111,256);

$marks2 = **array**(350,340,356,330,321);

$marks3 = **array**(630,340,570,635,434,255,298);

**echo** "<br><br>";

**echo** "-------------- Exercise: min and max value ---------------";

**echo** "<br> MIN <br>";

**echo** "1: ".**min**($marks1)."<br>";

**echo** "2: ".**min**($marks2)."<br>";

**echo** "3: ".**min**($marks3)."<br>";

**echo** "<br>MAX <br>";

**echo** "1: ".**max**($marks1)."<br>";

**echo** "2: ".**max**($marks2)."<br>";

**echo** "3: ".**max**($marks3)."<br>";

// OR

**echo** "<br>";

$max\_marks = **max**(**max**($marks1),**max**($marks2),**max**($marks3));

$min\_marks = **min**(**min**($marks1),**min**($marks2),**min**($marks3));

**echo** "Maximum mark from all: ".$max\_marks.'<br>';

**echo** "Minimum mark from all: ".$min\_marks;

// -------------- Exercise: min and max value ---------------

// Write a PHP script to find the maximum and minimum marks from the following set of arrays.

// Write a PHP script to generate random 11 characters string of letters and numbers.

$letters = **range**('A', 'Z'); // set any range

$numbers = **range**(1,50); // set any range

//error: array to string conversion: USE IMPLODE function to fix.

**echo** "<br><br>-------------- Exercise: min and max value ---------------<br>";

**echo** "Output letters array: ";

**echo** **implode**(' ',$letters);

**echo** "<br><br>";

**echo** "Output numbers array: ";

**echo** **implode**(' ',$numbers);

**echo** "<br>";

**echo** "<br> Output a random letter from letters array: ";

**echo** $letters[**array\_rand**($letters)];

**echo** "<br><br> Output a random number from numbers array: ";

**echo** $numbers[**array\_rand**($numbers)];

/\* ALL OUTPUTS:

Output letters array: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Output numbers array: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

Output a random letter from letters array: Y

Output a random number from numbers array: 40 \*/

?>