

Worksheet 6: Functions Practice

1. Create the following web page:

Working with numbers

Addition:	<input type="button" value="Calculate"/>
Subtraction:	<input type="button" value="Calculate"/>
Multiplication:	<input type="button" value="Calculate"/>
Division:	<input type="button" value="Calculate"/>
Power:	<input type="button" value="Calculate"/>
Modulus:	<input type="button" value="Calculate"/>
Area:	<input type="button" value="Calculate"/>
Square Perimeter:	<input type="button" value="Calculate"/>

- a) Upon load, the page should ask the user for two different numbers
- b) Upon pressing on any of the buttons, the value calculated should be displayed next to the corresponding text:

Working with numbers

Addition:	7	<input type="button" value="Calculate"/>
Subtraction:		<input type="button" value="Calculate"/>
Multiplication:		<input type="button" value="Calculate"/>
Division:	0.75	<input type="button" value="Calculate"/>
Power:		<input type="button" value="Calculate"/>
Modulus:		<input type="button" value="Calculate"/>
Area:		<input type="button" value="Calculate"/>
Square Perimeter:		<input type="button" value="Calculate"/>

- c) The result shown for the division should be rounded to two decimal places.

2. Create a web page which asks the user for a fractional number:

You are then required to first **research** and then use the following built-in methods to round the number. The result should be displayed in a table:

- a) parseInt()
- b) ceil()
- c) floor()
- d) round()

The number you entered was 5.22456

The rounding results for this number are

Method	Result
parseInt()	5
ceil()	6
floor()	5
round()	5

3. Create a web page which finds the position of a substring or character within another string:

Function Examples

indexOf and Parameters

Word: **Many of life's failures are people who did not realize how close they were to success when they gave up.**

Enter a character or substring taken from the above quote:

- a) The full string should be saved in a variable and placed in the HTML document once the page loads.
- b) The user is required to enter either a character or a substring in the provided text box.
- c) Once the *Find Position* button is pressed a method is to be called
 - This method needs to extract the inserted value in the text box in order to pass it to **another method** which returns the position value

- The returned value, the position value, should be displayed in the document as follows:

Function Examples

indexOf and Parameters

Word: **Many of life's failures are people who did not realize how close they were to success when they gave up.**

Enter a character or substring taken from the above quote:

Substring position: 28

- The **other method** needs to take the substring as input. Then use the `indexOf` built-in method to find the substring's position in the word and return it.

4. Edit the above web page to add information about the current date:

Function Examples

indexOf and Parameters

Word: **Many of life's failures are people who did not realize how close they were to success when they gave up.**

Enter a character or substring taken from the above quote:

Working with the Date object type

Day: 20 Month: 2 Year: 2017
Time: (number of milliseconds since 1970/01/01) 1487579915053

Date Format 1: 2/20/2017, 9:38:35 AM

Date Format 2: 2/20/2017

Time Format 1: 9:38:35 AM

Time Format 2: 09:38

Actual Local Time:

9:38 AM
2/20/2017

The code for the previous should be written inside the method which is called from the *onload* attribute.

HINT: For better code maintainability and readability, you should enclose the code in a separate function and then call that function from another function.

(The same one which loads the string variable on the page.)