JavaScript Exercise - 02

Q1 - Methods Vs Functions

Can you please explain the difference between methods and functions in JavaScript? Additionally, could you provide some guidance on how to use them effectively?

Q2 - The Farm Problem

In this challenge, a farmer is asking you to tell him how many legs can be counted among all his animals. The farmer breeds three species:

- `chickens` = 2 legs
- `cows` = 4 legs
- `pigs` = 4 legs

The farmer has counted his animals and he gives you a subtotal for each species. You have to implement a function that returns the **total number of legs** of all the animals.

```
Unset
animals(2, 3, 5) → 36

animals(1, 2, 3) → 22

animals(5, 2, 8) → 50
```

- Don't forget to `return` the result.
- The order of animals passed is `animals(chickens, cows, pigs)`.
- Remember that the farmer wants to know the **total number of legs** and not the total number of animals.

Q3 - How Many Vowels?

Create a function that takes a string and returns the number (count) of vowels contained within it.

```
Unset
countVowels("Celebration") ➞ 5

countVowels("Palm") ➞ 1

countVowels("Prediction") ➞ 4
```

- a, e, i, o, and u are considered vowels (not y).

Q4 - How Much is True?

Create a function which returns the number of true values there are in an array.

```
Unset
countTrue([true, false, false, true, false]) ➞ 2

countTrue([false, false, false, false]) ➞ 0

countTrue([]) ➞ 0
```

Q5 - Return the Next Number from the Integer Passed

Create a function that takes a number as an argument, increments the number by +1 and returns the result.

Examples

```
addition(0) → 1

addition(9) → 10

addition(-3) → -2
```

Notes

- Don't forget to `return` the result.
- If you get stuck on a challenge, find help in the Resources tab.
- If you're *really* stuck, unlock solutions in the Solutions tab.

Q6 - Find the Discount

Create a function that takes two arguments: the original price and the discount percentage as integers and returns the final price after the discount.

```
Unset
dis(1500, 50) → 750

dis(89, 20) → 71.2

dis(100, 75) → 25
```

Notes

Your answer should be rounded to two decimal places.

Q7 - Move Capital Letters to the Front

Create a function that moves all capital letters to the front of a word.

```
Unset
capToFront("hApPy") → "APhpy"

capToFront("moveMENT") → "MENTmove"

capToFront("shOrtCAKE") → "OCAKEshrt"
```

Notes

Keep the original relative order of the upper and lower case letters the same.

Q8 - Total Volume of all Boxes

Given an array of boxes, create a function that returns the total volume of all those boxes combined together. A box is represented by an array with three elements: length, width and height.

For instance, `totalVolume([2, 3, 2], [6, 6, 7], [1, 2, 1])` should return `266` since (2 x 3 x 2) + (6 x 6 x 7) + (1 x 2 x 1) = 12 + 252 + 2 = 266.

```
Unset
totalVolume([4, 2, 4], [3, 3, 3], [1, 1, 2], [2, 1, 1]) → 63

totalVolume([2, 2, 2], [2, 1, 1]) → 10

totalVolume([1, 1, 1]) → 1
```

Notes

- You will be given at least one box.
- Each box will always have three dimensions included.