Final Assessment - Another Draft

1. Write a function product that takes two string as arguments. The function will attempt to convert the strings to numbers, and return the product of the two numbers. If the convertion returns NaN for either string, the function should return a string: 'please insert two numbers'.

```
product(1, 2) // returns 2
product('dog', 'hello') // returns 'please insert two
numbers'
product('cat', 3) // returns 'please insert two numbers'
```

2. Write a function called arrContains that takes two arguments: an array, and an value. The function should return true if the array contains the given value, and false otherwise. You may not use any built-in array method - make a loop to check every element of the array.

Examples:

```
arrContains([1,2,3,4], 2);     // returns true
arrContains([1,2,3,4], 5);     // returns false
arrContains(['cat', 'giraffe', 'wolf'], 'dog'); //
returns false
```

3. You are given a function called mapArr that takes as arguments an array and a callback function. mapArr applies the callback on each element of the given array, and returns these values in a new array. For example:

```
function mapArr(arr, callback){
  var newArr = []
  for (var i = 0; i < arr.length; i++){
    newArr.push(callback(arr[i]))
  }
  return newArr
}
```

Complete the following code using mapArr:

```
arr1 = [3, 4, 5]
arr2 = mapArr(_____________________
_____________________________________
_)
console.log(arr2)
// will log:
// ['the number is: 3', 'the number is: 4', 'the number
is: 5']
```

4. Write a function replaceWords that takes three strings as arguments: sentence, word and newWord. The function will return a new string that is identical to sentence, except that all occurences of word are replaced by newWord. You may use the built-in string method split and the built-in array method join. You may not use any other built-in methods.

Examples:

```
var sentence = 'I have two dogs and three cats'
replaceWords(sentence, 'dogs', 'giraffes')
// will return 'I have two giraffes and three cats'
replaceWords(sentence, 'cats', 'geese')
// will return 'I have two dogs and three geese'
```

5. You are given the following code:

```
function createTask(description, completed){
  var task = {
    description: description,
    completed: completed
  }
  return task
}
```

Complete the function toggleCompleted:

```
function toggleCompleted(task){
  var task = createTask(_______________)
  return task
}

var buyMilk = createTask('buy milk', false)
console.log(buyMilk)
// Will log: { description: 'buy milk', completed: false
}
console.log(toggleCompleted(buyMilk))
// Will log: { description: 'buy milk', completed: true
}

var walkDog = createTask('walk dog', true)
console.log(toggleCompleted(walkDog))
// Will log: { description: 'walk dog', completed: false
}
```