Array Practice Problems

1. Write a function named "find" that has the following prototype:

   function find(data, target)

   data→ represents an array of integers, target → integer value

   The function will return true if target is one of the values in the array, and false otherwise. You may not use any input or output statements in the function. Be sure to test your function to see if it works.

2. Write a JavaScript function named "findInstances" that has the following prototype:

   function findInstances(values, target)

   values→ represents an array of integers, target → integer value

   The function will return the number of entries in the array whose value corresponds to target. For example, the following code fragment uses the function you need to define.

   ```
   a = [10, 20, 10, 10];
   alert(findInstances(a, 10));    // this will display the value 3 because there are 3 copies of 10.
   ```

   You may not use any input or output statements in the function. Be sure to test your function to see if it works.

3. Write a function named "doubleValues" that has as parameter an array of integer values and that updates each array entry with twice the original value. You may not use any input or output statements in the function. Be sure to test your function to see if it works.

4. Write a function named "equals" that has the following prototype:

   function equals(first, second)

   The function has two integer arrays as parameters and returns true if the arrays have the same values. For example, for:

   first → 10, 3, 7 and second → 10, 3, 7 equals will return true
   first → 10, 7, 3 and second → 10, 3, 7 equals will return false
   first → 10, 3, 7 and second → 10, 3, 7, 8 equals will return false

   You may not use any input or output statements in the function. Be sure to test your function to see if it works!

5. Write a function named "filter" that has the following prototype:

   function filter(data, cutoff)

   The function will create and return a new array with entries from the data integer array with a value less than or equal to cutoff. You may not use any input or output statements in the function. Be sure to test your function to see if it works!