

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

## Worksheet 4.2: 1D Array Exercises

1. Determine the output of the following code segment:

```
int i;
int [] numbers = new int [10];
for (i = 0; i < numbers.length; i++){
    numbers[i] = 2*(i - 5);
    numbers[i] = numbers[i] * numbers[i];
}
for (i = 0; i < numbers.length; i++){
    System.out.print(numbers[i] + " ");
}
```

2. Write a method that takes an array of integers and returns whether they are all even or not.

3. Write a method that takes an array of Strings and returns how many of the elements begin with a vowel. Be careful to consider the upper and lower case vowels.

- Write a method that takes an array of Strings and returns how many vowels are in all of the words.

- Consider the following code segment.

```
public void mysteryMethod(int[] first, int[] second){
    int smaller = 0;
    if(first.length < second.length)
        smaller = first.length;
    else
        smaller = second.length;

    int pos = 0;
    for(int i = 0; i < smaller; i++){
        if(first[i] < second[i]){
            temp = first[pos];
            first[pos] = second[pos];
            second[pos] = temp;
            pos++;
        }
    }
}
```

Given the following declarations:

```
int[] arrA = {5, 3, 6, 1, 2, 3, 12, 9, 7};
int[] arrB = {7, 9, 2, 11, 0, 4};
```

What do arrA and arrB hold after the following call: `mysteryMethod(arrA, arrB)`?