1. (2 pts) What criteria of a well-defined recursive method does the following violate?

```java
public static int factorial(int number) {
    return (number * factorial(number - 1));
}
```

2. (2 pts) Show a line(s) of code which will create an array of ints called numbers containing the numbers 5, 7, 10, 40, 8, and 71.

3. (2 pts) Even though an array is an object, we can’t call instance methods on the array, but we can access the field __________________ associated with the array, and this field tells us __________________ the array.

4. (2 pts) Suppose we have an array named numbers. If we want to access the first element of the array, we use the code numbers[_______], and if we want to access the last element of the array, we use the code numbers[__________].

5. (2 pts) What will happen when the class definition with the following main method is interpreted?

```java
public static void main(String[] args) {
    int[] numbers;
    System.out.println(numbers.length);
}
```