Section 1 - Java Syntax and Class Review Quiz Answers

1. What is the output of the following program?

```java
public static void main(String[] args)
{
  int a = 2;
  double b = 4.0;
  double c = 10.0;
  double out = c / b + a / (2 * a);
  System.out.println(out);
}
```

Answer: 2.5
a / (2 * a) is zero because we're dividing two integers. Whenever you divide two integers, you don't worry about anything that comes after the decimal point in the result - you're always left with a whole number.

2. What is the output of the following program?

```java
public static void main(String[] args)
{
```

```
  String in = "hello";
  String out = in.replaceAll("l", "");
  in = out.toUpperCase();
  System.out.println(in);
 }
```

Answer: HEO

First, we got rid of all the "l"s in *hello*. Then, we converted the string to uppercase and re-assigned the original *in* variable. **Careful:** if we hadn't reassigned the original variable, we would have printed just *hello*.

3. Given the following program, write code to capitalize the first letter of lowerCaseString.

```
public static void main(String[] args)
 {
  String lowercaseString = "this is a very long lower case string";
  // One possible answer
  if (lowercaseString.length() > 0)
  {
    lowercaseString = Character.toUpperCase(lowercaseString.charAt(0))
+
      lowercaseString.substring(1, lowercaseString.length());
  }

  System.out.println(lowercaseString);
 }
```

4. Which of the following are correct ways of creating arrays in Java?

```
a. String[] myArray = new String[];
b. String[] myArray = { "Hey", "Bye", "Hello" };
c. int myArray = new int[10];
d. int[10] myArray = new int[];
```

e. All of the above

Answer:
b, c

5. What is the output of the following program?

```java
public static void main(String[] args)
{
  int val = 10;
  switch (val)
  {
    case 1:
      System.out.println("Orange");
      break;
    case 2:
      System.out.println("Pear");
      break;
    default:
      System.out.println("Apples!");
      break;
  }
}
```

Answer:
Apples!