

# CPS 210 - Exam 3

---

Name:

---

**1)(10 pts) Will the following code execute without an error? What are the errors?**

```
int[] array = {1,2,3,4,5};

for(int i = 0; i <= 5; i++) {
    array[i] = i + 0.5;
}
```

- A) True
- B) False

**Explain:**

**2)(10 pts) When passing parameters to a method, which of the following are true?**

- A) Integers are passed by reference.
- B) Doubles are passed by copy.
- C) Integer arrays are passed by reference.
- D) Double arrays are passed by copy.

3) (20 pts) In the `main` method create a double array size 10 and fill it with values. Pass the array as a parameter to a method that finds the minimum value in the array and returns it.

```
public class Exam3 {
    public static void main(String[] args) {
```

}

\_\_\_\_\_ ( ) {

}

}

#### 4) What is the output of the following program?

```
public class Exam3 {
    public static void main(String[] args) {
        int x = 6;
        int y = 2;
        int z = 5;
        double[] position = {x, y, z};

        System.out.println(manipulate(position));
        for(int i = 0; i < position.length; i++) {
            System.out.println(position[i]);
        }
    }

    public static int manipulate(int[] position) {
        position[0] = 5;
        position[1] = 10;
        position[2] = 15;
        return position[0] + position[1] + position[2];
    }

    public static double manipulate(double[] position) {
        position[0] = 10.0;
        position[1] = 20.0;
        position[2] = 30.0;
        return position[0] + position[1] + position[2];
    }
}
```

A) Output (10 pts):

B) Explain why (10 pts):

C) Create a method that will print the contents of the **position** array when it is passed as a parameter. (10 pts)

5) Answer the following questions about the following code:

```
int[][] array = {{1,2,3,4},{5,6,7,8},{9,10,11,12}};
```

1	2	3	4
5	6	7	8
9	10	11	12

A) What is the array index of 7? (10 pts)

B) Write the statements that will print all the values in the array along with their index. (10 pts)

Expected output:

```
1: 0 0
2: 0 1
3: 0 2
and so on...
```

C) Write a method that will return the sum of all the values in the array. (10 pts)