

**Multiple Choice:** /\* 2 points each \*/

\_\_\_\_\_ 1. For what range of values of the variable x would the body of this Processing for statement be executed?

```
for (int x = 0; x < 20; x++) {  
    println(x);  
}
```

- A) 0 to 20
- B) 1 to 20

- C) 0 to 19
- D) 0 to 21
- E) None of these

\_\_\_\_\_ 2. How many circles are drawn by this code?

```
for (int x = 90; x <= 10; x = x - 10) {  
    ellipse( x, 100, 5, 5);  
}
```

- A) 0
- B) 1

- C) 9
- D) 10
- E) None of these

**Short Answer:**

1. Write a for loop in Processing that prints all of the multiples of 7 from 49 up to 777 on separate lines in the Console. /\* 4 points \*/

2. Explain, on each given line, what Processing is doing in the following code. /\*3 points\*/

```
for (int k = 1; k <= 3; k++) { _____  
    println("hi"); _____  
    println("bye"); _____  
}  
println( "done" ); _____
```

*Short Answer (continued):*

3. Fill in the blanks in this Processing code so that it prints the following table in the Console: /\* 5 points \*/ Hints: “\t” is the tab character – it's how we can get the inches column to line up after printing yards. Your code will include every row, not the “...”

Yards	Inches
1	36
2	72
3	108
.	
.	
.	
10	360

```
int yards, inches;
println("Yards \t Inches");
for ( _____ ; _____ ; _____ ) {
  _____;
  print( yards );
  print( "\t");
  println(inches);
}
```

4. Explain, on each given line, what Processing is doing in the following code. /\*9 points\*/

```
size(300, 300);
background(255);
stroke(0);
```

```
int x = 0; _____
```

```
for (int c = 255; c > 0; c -= 15) { _____
```

```
  fill(c); _____
```

```
  rect(x, height/2, 10, 10); _____
```

```
  x = x + 10; _____
```

```
} _____
```