

Multiple Choice: / 2 points each */*

C 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

A 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 that prints all of the multiples of 7 from 49 up to 777 on separate lines in the Console. /* 4 points */

```
for ( int num = 49; num <= 777; num = num + 7 ) {  
    println( num );  
}
```

2. What would be printed by the following Processing code? /* 3 points */

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

hi
bye
hi
bye
hi
bye
done

3. What would be printed by the following Processing code? /* 3 points */

```
int total = 0;  
total = total + 3;  
total = total + 11;  
total = total + 8;  
print("total = ");  
println( total );
```

total = 22

4. What would be printed by the following Processing code? /* 3 points */

```
int total = 0;  
total = +3;  
total = +11;  
total = +8;  
print("total = ");  
println( total );
```

total = 8

Short Answer (continued):

5. What is printed by the following code for each given pair of values of a and b?: /* 1 point for each part */

```
int sum = a;
for (int k = 1; k <= b; k++) {
    sum = sum + a;
}
print("sum = ");
println(sum);
```

a) a = 7 and b = 2

sum = 21

c) a = 50 and b = 0

sum = 50

b) a = 4 and b = 3

sum = 16

d) a = 0 and b = 5

sum = 0

4. Fill in the blanks in this Processing code so that it prints the following table in the Console: /* 4 points */ Hint: “\t” is the tab character – it’s how we can get the inches column to line up after printing yards.

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

```
int yards, inches;
println("Yards \t Inches");
```

```
for ( yards = 1; yards <= 10; yards = yards + 1 ) {

    inches = yards * 36;

    print( yards );
    print( "\t");
    println(inches);
}
```