

## Nested Iteration Worksheet

Name: \_\_\_\_\_

Period: \_\_\_\_\_ PC #: \_\_\_\_\_

Write down the output for the following code segment.

1.

```
for(int a=1; a<=2; a++)
for(int b=1; b<4; b++)
    System.out.println(a+b);
```

---

2.

```
for(int i=1; i<=5; i++){
for(int j=1; j<=i; j++)
    System.out.print("*");
System.out.println();
}
```

---

3.

```
int total = 0;
for(int c=1; c<5; c++)
    for(int d=1; d<=c; d++)
        total = total + d;
System.out.println(total);
```

---

4.

```
String s = "toad";
for(int e=0; e<s.length(); e++)
{
    for(int f=0; f<=e; f++){
        System.out.print(s.charAt(f));
    }
    System.out.println();
}
```

5.

```
int size=5;
for(int x=0; x<=size; x++ )
{
    for(int y=x; y<=size; y++ )
        System.out.print(" ");
    for(int z=x; z>=0; z--)
        System.out.print("#");
    System.out.println();
}
```

---

6.

```
for (int i = 1; i <= 5; ++i) {
    System.out.println("Outer loop iteration " + i);

    for (int j = 1; j <=2; ++j) {
        System.out.println("i = " + i + " ; j = " + j);
    }
}
```

---

7.

```
int i = 1;
while (i <= 5) {

    System.out.println("Outer loop iteration " + i);

    for (int j = 1; j <= 2; ++j) {
        System.out.println("i = " + i + " ; j = " + j);
    }

    ++i;
}
```