

Name: _____

Date: _____

Statement Counting

1. Find the number of statements executed by the below code?

```
int total = 0;
for(int x = 0; x<data.length; x++)
{
    total+=data[x];
}
```

2. Find the number of statements executed by the below code?

```
for(int x=0;x<num/2;x++)
    System.out.println(data[x]);
```

3. How many times is test run?

```
for (int p = 0; p < n; p++)
    for (int q = 0; q < n; q++)
        test();
```

4. How many times is test run?

```
for (int p = 1; p < n; p++)
    for (int q = 1; q < n; q++)
        test();
```

5. Assume method turtle runs $3n+1$ statements each time it is called. What is the statement count of the below loop?

```
int x=0;
while( x<data.length)
{
    turtle(data);
    x++;
}
```

6. Find the number of statements executed by the below code?

```
for(int k = 0; k < n; k++)
    for(int j = n; j > 0; j --)
    {
        int temp = data[j];
        data[j] = data[k];
        data[k] = temp;
    }
```

7. Assume method modify runs n-2 statements each item it is called. What is the statement count of the below loop?

```
int x=0;
while( x<data.length)
{
    System.out.println(data[x]);
    x+=2;
}
```

8. Assume method modify runs n-2 statements each item it is called. What is the statement count of the below loop?

```
int x=0;
while( x<data.length)
{
    modify(data);
    x+=2;
}
```

9. Find the number of statements executed by the below code?

```
for (int p = 0; p < n; p++)
    for (int q = 0; q < n; q++)
        for(int r=0; r < n; r++)
            System.out.println(p*q+r);
```

10. Find the number of statements executed by the below code?

```
for(int x=0;x<data.length;x++)
{
    for(int y = 0; y<=x; y++)
        System.out.print(data[y] + " ");
    System.out.println();
}
```