Visual Basic
Tracing For Loops Worksheet #3

Name -
Period -

Trace the following code segments showing the values for each variable in the appropriate columns. Write "infinite loop" if the loop never ends. **Circle the final values stored in each variable.**

1.

```
Dim sum As Integer = 0
Dim amount As Integer = 2

For J = 1 To 3
      sum += amount
Next
```

sum	J	amount

2.

```
Dim sum As Integer = 20
Dim upper As Integer = 8
Dim lower as Integer = 2

For J = lower To upper Step 2
      sum += 1
Next
```

sum	J	upper	lower

3.

```
Dim sum As Integer = 0

For J = 3 To 1 Step -1
      sum += 1
Next
```

sum	J

4.

```
Dim sum As Integer = 24

For J = 1 To 3
      sum /= 2
Next
```

sum	J

5.

```
Dim sum As Integer = 1

For J = 2 To 5
      sum = sum + J - 1
Next
```

sum	J

6.

```
Dim sum As Integer = 10

For J = 1 To 3
      sum -= 1
Next
```

sum	J

7.

```
Dim sum As Integer = 0

For J = 1 To 1000
      sum += J
Next
```

sum	J

just circle final values for this exercise

Hint: 1 + 2 + 3 + ... + n = n(1 + n)/2