

Trace the following code segments showing the values for each variable in the appropriate columns. If an error occurs, explain it. Write "infinite loop" if a loop never ends. **Circle the final values stored in each variable.**

```
1.                                     J           sum  
Dim sum As Integer = 0  
  
For J = 1 To 3  
    sum += J  
Next
```

```
2.                                     num         sum  
Dim num As Integer = 1  
Dim sum As Integer = 0  
  
While (num <= 3)  
    sum = sum + num  
    num = num + 1  
End While
```

```
3.                                     num         sum  
Dim num As Integer = 11  
Dim sum As Integer = 0  
  
While (num <= 13)  
    sum += num  
    num += 1  
End While
```

```
4.                                     num         sum  
Dim num As Integer = 1  
Dim sum As Integer = 0  
  
While (num <= 5)  
    sum += num  
    num += 2  
End While
```

```
5.                                     num         sum  
Dim num As Integer = 3  
Dim sum As Integer = 0  
  
While (num >= 1)  
    sum += num  
    num -= 1  
End While
```

```
6.                                     num         sum  
Dim num As Integer = 2  
Dim sum As Integer = 0  
  
While (num <= 8)  
    sum += num  
    num *= 2  
End While
```