

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	$\frac{\text{sum}}{0}$	$\frac{J}{2}$
For J = 2 To 3		
sum = sum + 1		
Next		

2.

Dim sum As Integer = 0	$\frac{\text{sum}}{0}$	$\frac{J}{4}$
For J = 4 To 6		
sum += 1		
Next		

3.

Dim sum As Integer = 0	$\frac{\text{sum}}{0}$	$\frac{J}{2}$
For J = 2 To 8 Step 2		
sum += 1		
Next		

4.

Dim sum As Integer = 0	$\frac{\text{sum}}{0}$	$\frac{J}{10}$
For J = 10 To 8 Step -1		
sum += 1		
Next		

5.

Dim sum As Integer = 80	$\frac{\text{sum}}{80}$	$\frac{J}{3}$
For J = 3 To 1 Step -1		
sum /= 2		
Next		

6.

Dim sum As Integer = 0	$\frac{\text{sum}}{0}$	$\frac{J}{1}$
For J = 1 To 3		
sum += J ' not sum += 1		
Next		

7. What is the formula for determining counting the number of For loop iterations?

8.		
For J = 11 To 21	How many loop iterations?	
MessageBox.Show("Hello World")		
Next		

9.		
For J = 99 to 105	How many loop iterations?	
MessageBox.Show("Hello World")		
Next		