

**Short Answer** - Trace the following code segments & circle the final value of each variable. If an error would occur, explain it. If an infinite loop occurs, write "infinite loop".

1.  
Dim num As Integer = 1 num  
  
While (num <= 3)  
    num += 1  
End While

2.  
Dim num As Integer = 5 num  
Dim sum As Integer = 0 sum  
  
While (sum < 20)  
    sum += num  
    num += 4  
End While

3. Assume the user inputs the values 10, 5, 3, -1 in this order.

Dim score As Integer = 0 total score  
Dim total As Integer = 0  
  
While (score <> -1)  
    score = InputBox("Enter a score: ")  
  
    If (score = -1) Then  
        Exit While  
    Else  
        total += score  
    End If  
  
End While

Trace the following code segments that use the array mNums & show the output. Write "error" if necessary.

```
Dim mNums() As Integer = {13, 5, 8, 3}
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Dim J As Integer = 0  
Label4.Text = mNums(1) 4. \_\_\_\_\_

Label5.Text = mNums(2) - mNums(3) 5. \_\_\_\_\_  
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Dim total As Integer = 0 J total

For J = 0 To 3  
    total += mNums(J)  
Next

Label6.Text = total 6. \_\_\_\_\_  
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Dim sum As Integer = 0

For J = 1 To mNums.Length() - 1 J sum  
    sum += mNums(J)  
Next

Label7.Text = sum 7. \_\_\_\_\_

**Answer the following on the back of the paper**

8. Write a code segment that uses a While loop to add up the integers from 13 to 19 inclusive storing the sum in a variable named sum.
9. Write a code segment that uses a While loop to add all the integers typed by a user into an InputBox until the user inputs -1. Do not add the -1 to the running total. Be sure to declare any necessary variables.
10. Write out the Hello World program.