

Visual Basic
 Tracing While Loops Worksheet #4

Name -
 Period -

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. Assume the user inputs the values 10, 8, 9, -1

	<u>sum</u>	<u>num</u>	<u>exitLoop</u>
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```

Dim sum As Integer = 0
Dim num As Integer = 0
Dim exitLoop As Boolean = False

While (exitLoop = False)
    sum += num
    num = InputBox("Enter a number: ")

    If (num = -1) Then
        exitLoop = True
    End If

End While
    
```

2. Assume the user inputs the values 10, 8, 9, -1

	<u>sum</u>	<u>num</u>	<u>exitLoop</u>
--	------------	------------	-----------------

```

Dim sum As Integer = 0
Dim num As Integer = 0
Dim exitLoop As Boolean = False

While (Not exitLoop)
    num = InputBox("Enter a number: ")

    If (num = -1) Then
        exitLoop = True
    Else
        sum += num
    End If

End While
    
```

3.

	<u>sum</u>	<u>num</u>
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```

Dim sum As Integer = 0
Dim num As Integer = 1

While (num < 5)
    sum = sum + Math.Pow(2, num)
    num += 1
End While
    
```

4.

	<u>sum</u>	<u>num</u>
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```

Dim num As Integer = 0
Dim sum As Integer = 29

While (sum > 0)
    sum -= num

    If (sum Mod 7 = 0)
        Exit While
    Else
        num += 1
    End If

End While
    
```