Visual Basic
Tracing If Statements Worksheet #8

Name -
Period -

Trace the following code segments. Assume all variables are declared. Circle the final value of each variable in each exercise.

1.

num answer

```
num = 5
answer = 0

If (num Mod 2 = 1) Then
        answer = 1
Else
        answer = 2
End If
```

2.

num answer

```
num = 11
answer = 0

If (num Mod 2 = 0 Or num Mod 3 = 0 Or num Mod 5 = 0 Or num Mod 7 = 0) Then
        answer = 1
Else
        answer = 2
End If
```

3.

num answer

```
num = 5
answer = 0

If (num Mod 2 <> 0 And num Mod 3 <> 0 And num Mod 5 <> 0 Or num = 2 Or num = 3 Or num = 5) Then
        answer = 1
        MessageBox.Show(num + " is prime")
Else
        answer = 2
        MessageBox.Show(num + " is not prime")
End If
```

4.

num answer

```
num = 70
answer = 0

If (num >= 90) Then
        answer = 1
        MessageBox.Show("A")
ElseIf (num >= 80) Then
        answer = 2
        MessageBox.Show("B")
ElseIf (num >= 70) Then
        answer = 3
        MessageBox.Show("C")
End If
```

5.

divisor1 divisor2 dividend answer

```
divisor1 = 3
divisor2 = 5
dividend = 1900000005
answer = 0

If (dividend Mod divisor1 = 0) Then
        answer = 1
        MessageBox.Show(dividend + " is evenly divisible by " + divisor1)

        If (dividend Mod divisor2 = 0) Then
                answer = 2
                MessageBox.Show(dividend + " is evenly divisible by " + Str(divisor1 * divisor2))
        Else
                answer = 3
        End If

Else
        answer = 4
End If
```