Visual Basic
Tracing If Statement Worksheet #4

Name -
Period -

Assume that the control expressions listed below fit into the `If` statement in the following code segment:

```
a = 2       d = 6       g = 15      p = 24
b = 3       e = 10      h = 21      s = 30
c = 4       f = 11      m = 23      q = 100

If ( ___________________ ) Then
     MessageBox.Show("True")
Else
     MessageBox.Show("False")
End If
```

For each exercise, indicate whether the control expression is **True** or **False** by circling T for True or F for False.

T F 1. `16 Mod 2 = 0` ' 16 is an even number

T F 2. `17 Mod a = 0` ' 17 is not an even number

T F 3. `h Mod 2 = 0` ' _____

T F 4. `m Mod 2 = 1` ' _____ is an odd number

T F 5. `s Mod 2 <> 1` ' _____

T F 6. `q Mod e = 0` ' 10 is a factor of _____

T F 7. `d * 4 = p` ' 6 is a factor of _____

T F 8. `h Mod 3 = 0` ' 21 is evenly _____ by 3

T F 9. `g Mod b = 0` ' _____ is evenly divisible by _____

T F 10. `s Mod d = 0` ' _____ is a divisor of _____

T F 11. `s Mod f <> 0` ' _____ is not a divisor of _____

T F 12. `p Mod c = 0` ' 24 is a multiple of _____

T F 13. `f = 2 Or f = 3 Or f = 5 Or (f Mod 2 <> 0 And f Mod 3 <> 0 And f Mod 5 <> 0)`
' _____ is prime

T F 14. `e = 2 Or e = 3 Or e = 5 Or (e Mod 2 <> 0 And e Mod 3 <> 0 And e Mod 5 <> 0)`
' _____ is not prime