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'After discovering that there is a problem with using the Round function  
'in Visual Basic, I decided to develop some possible work arounds as a  
'fix to the problem. The Round function in Visual Basic uses a process  
'referred to as baker's rounding rather than arithmetic rounding. Baker's  
'rounding is symmetric meaning that 1.5 and 2.5 both will round to 2.  
'Decimal number in the form x.5 will round up when the integer portion is  
'odd and will round down when the integer portion is even.

Public answer As clsRound

Private Sub Command1\_Click()

```
Form1.Cls
Form1.Print CalcMod(1.5)
Form1.Print CalcMod(2.5)
Form1.Print CalcMod(3.5)
Form1.Print CalcMod(4.5)
```

End Sub

Private Sub Command2\_Click()

```
Dim num1 As Double, num2 As Double, num3 As Double, num4 As Double
num1 = 1.5
num2 = 2.5
num3 = 3.5
num4 = 4.5
Form1.Cls
Form1.Print Fix(num1 + 0.5)
Form1.Print Fix(num2 + 0.5)
Form1.Print Fix(num3 + 0.5)
Form1.Print Fix(num4 + 0.5)
```

End Sub

Private Sub Command3\_Click()

```
Dim num1 As Double, num2 As Double, num3 As Double, num As Double
num1 = 1.5
num2 = 2.5
num3 = 3.5
num4 = 4.5
Form1.Cls
answer.A = num1
Form1.Print answer.MyRound
answer.A = num2
Form1.Print answer.MyRound
answer.A = num3
Form1.Print answer.MyRound
answer.A = num4
Form1.Print answer.MyRound
```

End Sub

Private Sub Command4\_Click()

```
Form1.Cls
Form1.Print Round(1.5, 0)
Form1.Print Round(2.5, 0)
Form1.Print Round(3.5, 0)
Form1.Print Round(4.5, 0)
```

End Sub

Private Sub Form\_Load()

```
Set answer = New clsRound
```

End Sub

Private Function CalcMod(ByVal num As Double) As Long

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If num Mod 2 = 0 Then

    CalcMod = Round(num + 0.51, 0)

Else

    CalcMod = Round(num + 0.5, 0)

End If

End Function

```
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```

```
Private m_A As Double
```

```
Public Property Get A() As Double
```

```
    A = m_A
```

```
End Property
```

```
Public Property Let A(ByVal vA As Double)
```

```
    m_A = vA
```

```
End Property
```

```
Public Function MyRound() As Long
```

```
    Dim solution As Long
```

```
    If Int(m_A) Mod 2 = 0 Then
```

```
        MyRound = Round(m_A + 0.51, 0)
```

```
    Else
```

```
        MyRound = Round(m_A + 0.5, 0)
```

```
    End If
```

```
End Function
```