

frmQuadratic - 1

Option Explicit

Private answer As CQuadratic

Private Sub cmdCompute\_Click()

    Select Case txtA.Text

        Case Is = ""

            txtA.SetFocus

            MsgBox "Must enter value for a!", vbOKOnly, "Invalid entry!"

            Exit Sub

    End Select

    Select Case txtB.Text

        Case Is = ""

            txtB.SetFocus

            MsgBox "Must enter value for b!", vbOKOnly, "Invalid entry!"

            Exit Sub

    End Select

    Select Case txtC.Text

        Case Is = ""

            txtC.SetFocus

            MsgBox "Must enter value for c!", vbOKOnly, "Invalid entry!"

            Exit Sub

    End Select

    answer.A = txtA.Text

    answer.B = txtB.Text

    answer.C = txtC.Text

    txtA.Text = ""

    txtB.Text = ""

    txtC.Text = ""

    Select Case answer.discriminant

        Case Is < 0

            MsgBox "Discriminant is less than 0.", vbOKOnly, "No real solutions!"

            txtA.SetFocus

            picSolutions.Cls

            picSolutions.Print "The discriminant is ..."

            picSolutions.Print

            picSolutions.Print answer.discriminant

            Exit Sub

    End Select

    picSolutions.Cls

    picSolutions.Print answer.A & "x^2 + " & answer.B & "x + " & answer.C & " = 0"

    picSolutions.Print

    picSolutions.Print "x = " & answer.solution1 & " and x = " & answer.solution2

End Sub

Private Sub cmdExit\_Click()

    End

End Sub

Private Sub Form\_Load()

    Set answer = New CQuadratic

End Sub

CQuadratic - 1

```
Private m_A As String
Private m_B As String
Private m_C As String
Private m_sol1 As Single
Private m_sol2 As Single
```

```
Public Property Get A() As String
    A = m_A
End Property
```

```
Public Property Let A(ByVal vA As String)
    m_A = vA
End Property
```

```
Public Property Get B() As String
    B = m_B
End Property
```

```
Public Property Let B(ByVal vB As String)
    m_B = vB
End Property
```

```
Public Property Get C() As String
    C = m_C
End Property
```

```
Public Property Let C(ByVal vC As String)
    m_C = vC
End Property
```

```
Public Function discriminant() As Single
    discriminant = m_B ^ 2 - 4 * m_A * m_C
End Function
```

```
Public Function solution1() As Single
    solution1 = (-m_B + Sqr(m_B ^ 2 - 4 * m_A * m_C)) / (2 * m_A)
End Function
```

```
Public Function solution2() As Single
    solution2 = (-m_B - Sqr(m_B ^ 2 - 4 * m_A * m_C)) / (2 * m_A)
End Function
```