```vb
1  'Logan Garcia
2  'RCET0265
3  'Etch o sketch
4
5  Public Class Etchasketch
6      Dim penColor As Color
7      Dim myPen As New Pen(Color.Black)
8      Dim oldX As Integer
9      Dim oldY As Integer
10     Dim graph As Graphics
11     Private Sub PictureBox1_MouseMove(sender As Object, e As MouseEventArgs)    ⮠
         Handles PictureBox1.MouseMove
12         Me.Text = "x: " & e.X & " y: " & e.Y & " Mouse Button: " &              ⮠
             e.Button.ToString
13         graph = PictureBox1.CreateGraphics 'create the graphics object
14         If e.Button.ToString <> "None" Then 'draw the line
15             graph.DrawLine(myPen, oldX, oldY, e.X, e.Y)
16         End If
17         oldX = e.X
18         oldY = e.Y
19         'create the pen object
20     End Sub
21
22     Private Sub ChangeColorButton_Click(sender As Object, e As EventArgs) Handles ⮠
         ChangeColorButton.Click
23         ColorDialog1.ShowDialog() 'the color wheel
24         penColor = ColorDialog1.Color 'makes the pen the color that was chosen
25         myPen.Color = penColor 'setting the mouse as the pen
26     End Sub
27
28     Private Sub DrawButton_Click(sender As Object, e As EventArgs) Handles       ⮠
         DrawButton.Click
29         Dim Xvalue As Decimal
30         Dim Yvalue As Decimal
31         Dim oldY2 = 200
32         Dim oldX2 = 0
33
34         myPen.Color = Color.Black
35         graph.Clear(BackColor) 'erase
36         'Verticle Lines (Same X change Y)
37         For xVal = 80 To 720 Step 80
38             For yVal = 5 To 400 Step 10
39                 graph.DrawLine(myPen, xVal, yVal, xVal, yVal + 5)
40             Next
41         Next
42         'Horizontal Lines (Same Y change X)
43         For yVal = 40 To 360 Step 40
44             For xVal = 5 To 800 Step 10
45                 graph.DrawLine(myPen, xVal, yVal, xVal + 5, yVal)
46             Next
47         Next
48         'Creates sinewave
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49              myPen.Color = Color.Blue
50          For X = 1 To 800 'Draw graticules
51              Yvalue = 200 - (50 * Math.Sin(X / 400 * 2 * Math.PI)) 'Draw sine
52              Xvalue = X
53              graph.DrawLine(myPen, oldX2, oldY2, Xvalue, Yvalue)
54              oldX2 = Xvalue
55              oldY2 = Yvalue
56          Next
57          'Creates sinewave phase of cos
58          myPen.Color = Color.Green
59          oldX2 = 0
60          oldY2 = 200
61          For X = 1 To 800 'Draw graticules
62              Yvalue = 200 - (50 * Math.Cos(X / 400 * 2 * Math.PI)) 'Draw Cos
63              Xvalue = X
64              graph.DrawLine(myPen, oldX2, oldY2, Xvalue, Yvalue)
65              oldX2 = Xvalue
66              oldY2 = Yvalue
67          Next
68          'creates a tangent wave
69          myPen.Color = Color.Red
70          oldX2 = 0
71          oldY2 = 200
72          For X = 1 To 800 'Draw graticules
73              Yvalue = 200 - (50 * Math.Tan(X / 400 * 2 * Math.PI)) 'Draw Tan
74              If Yvalue > 600 Then
75                  Yvalue = 600
76              ElseIf Yvalue < -200 Then
77                  Yvalue = -200
78              End If
79              Xvalue = X
80              If (X > 95 And X < 105) Or (X > 295 And X < 305) Or (X > 495 And X < ⮡
                    505) Or (X > 695 And X < 705) Then
81                  ' DO NOT DRAW
82              Else
83                  graph.DrawLine(myPen, oldX2, oldY2, Xvalue, Yvalue)
84              End If
85              oldX2 = Xvalue
86              oldY2 = Yvalue
87          Next

89      End Sub

91      Private Sub EraseButton_Click(sender As Object, e As EventArgs) Handles     ⮡
          EraseButton.Click
92          Dim oldTop = Me.Top
93          'Shakes the EtchASketch to erase
94          For i = 1 To 3
95              For j = 1 To 9000000 'shaking the screen
96                  If j < 4500000 Then
97                      Me.Top = oldTop - 50
98                  Else
```

```vb
 99                         Me.Top = oldTop
100                     End If
101                 Next
102             Next
103
104             graph.Clear(BackColor)
105         End Sub
106 End Class
107
```