Visual Basic
Collision Detection Worksheet \#1

## Diagram A



1. Complete the If statement so it detects a collision between a picture box named picX and the horizontal line depicted in Diagram $\mathbf{A}$.
```
If (picX.Top
```

$\qquad$

``` And picX.Bottom
``` \(\qquad\)
``` And picX.Right
``` \(\qquad\)
``` And picX.Left
``` \(\qquad\)
``` )Then MessageBox.Show("collision with line")
End If
```

2. Complete the If statement so it detects a collision between a picture box named picX and the vertical line depicted in Diagram B.

If (picX.Right $\qquad$ And picX.Left $\qquad$ And picX.Bottom $\qquad$ And picX.Top $\qquad$ )Then MessageBox.Show("collision with line")
End If
3. On the back of this paper, draw a rectangle that represents a Form that is 300 pixels wide and 300 pixels tall. Label the x and y axis. Sketch the lines drawn by the following statements
e.Graphics.DrawLine(Pens.Black, 30, 70, 240, 70)
' line 1
e.Graphics.DrawLine (Pens.Black, 50, 110, 50, 220)
' line 2

Label the lines as "Line 1" and "Line 2". Also, label the endpoints of both lines in (x, y) coordinate notation.
Write If statements that would detection collisions between a picture box named picX and the lines labeled line 1 and line 2 in Exercise \#3 above.
4. (line 1)
5. (line 2)

