

Read the online lecture notes for Collision Detection probably at  
[http://www.minich.com/education/wyo/vb/lecture\\_notes/collision\\_detection.php](http://www.minich.com/education/wyo/vb/lecture_notes/collision_detection.php)

True or False

- \_\_\_\_\_ 1. The notes explain how to do collision detection between PictureBoxes & horizontal lines?
- \_\_\_\_\_ 2. The notes explain how to do collision detection between PictureBoxes & vertical lines?
- \_\_\_\_\_ 3. The notes explain how to do collision detection between PictureBoxes & diagonal lines?
- \_\_\_\_\_ 4. The notes explain how to do collision detection between PictureBoxes & curved lines?
- \_\_\_\_\_ 5. The notes explain how to do collision detection between two different PictureBoxes?

6. What is collision detection according to our class lecture notes?

7. Describe an example of collision detection in an app, an Xbox game, or other computer program that you enjoy. Describe the object or objects and how they interact with each other.

8. Write a line of code that uses the `DrawLine` method to draw a black line segment from the point on the computer graphics coordinate system of (0, 70) to the point (240, 70).

9. What is wrong with the following statement? `picCircle.Bottom = 100`

10. In addition to `Left`, what other properties of a `PictureBox` can be used in an `If` statement as part of an algorithm that detects collisions?

11. What does the following `If` statement do?

```
If (picX.Right > 40 And picX.Left < 40 And picX.Bottom > 110 And picX.Top < 220) Then  
    MessageBox.Show("Collision Occurred")  
End If
```

12. On the back of the paper, sketch a diagram (like those in the lecture notes) that fully illustrates a circle named `picCircle` colliding with a horizontal line that extends from the point (0, 50) to (200, 50).