Problem Set 12 - Classes and Objects

p1: circle.py

Write a definition for a class named Circle with attributes center and radius, where center is a Point object and radius is a number.

Instantiate a Circle object that represents a circle with its center at (150, 100) and radius 75.

Write a function named point_in_circle() that takes a Circle and a Point and returns True if the Point lies in or on the boundary of the circle.

Write a function named rect_in_circle() that takes a Circle and a Rectangle and returns True if the Rectangle lies entirely in or on the boundary of the circle.

Write a function named rect_circle_overlap() that takes a Circle and a Rectangle and returns True if any of the corners of the Rectangle fall inside the circle.
Or as a more challenging version, return True if any part of the Rectangle falls inside the circle.