

CS1115 Lab 12 (November 29, 2012)

Completing the lab is very important, but your work is not graded and it is not submitted. If you finish before the hour is over, then you can leave early or you can work on the "Finished Early" problems. If you do not finish the problems before the end of class, then be sure to ask enough questions so that you can complete the exercises in the next day or two on your own.

Download the class definition files `Point.m`, `PointSet.m`, and `Circle.m` from the syllabus page and study the associated test scripts.

1. Point

Add an instance method `Q = Reflect(ThisPoint)` to the `Point` class. The point referenced by `Q` should be the reflection across the 45-degree line of the point referenced by `ThisPoint`. Write a short script that checks this out.

2. Diameter

Add an instance method `[P,Q] = Diameter(ThisPointSet)` to the `PointSet` class that returns in `P` and `Q`, references to the two points in `ThisPointSet` that are furthest apart.

3. Nested Circles

Add a boolean-valued instance method to the `Circle` class `alfa = Nested(ThisCircle,AnotherCircle)` that indicates whether or not one circle is completely inside the other circle.

Please delete your files from the computer before you leave the lab!