**Lecture/Workshop (Week 6)**

**public class Circle**

**{**

**private double radius;**

**public Circle(double theRadius)**

**{**

**radius = theRadius;**

**}**

**public void displayRadius()**

**{**

**System.out.println("Radius: " + radius);**

**}**

**public void displayDiameter()**

**{**

**double diameter = 2 \* radius;**

**System.out.println("Diameter: " + diameter);**

**}**

**public void displayPerimeter()**

**{**

**double perimeter = 2 \* Math.PI \* radius;**

**System.out.println("Perimeter: " + perimeter);**

**}**

**public void displayArea()**

**{**

**double area = Math.PI \* radius \* radius;**

**System.out.println("Area: " + area);**

**}**

**public void displayAll()**

**{**

**displayRadius();**

**displayDiameter();**

**displayPerimeter();**

**displayArea();**

**}**

**}**

// This would be in a different file, you can't have 2 public classes **.java** file.

**public class CircleTester**

**{**

**public static void main(String[] args)**

**{**

**Circle myCircle = new Circle(12.0);**

**myCircle.displayRadius();**

**myCircle.displayDiameter();**

**myCircle.displayPerimeter();**

**myCircle.displayArea();**

**System.out.println();**

**myCircle.displayAll();**

**}**

**}**

// Output

**Radius: 12.0**

**Diameter: 24.0**

**Perimeter: 75.39822368615503**

**Area: 452.3893421169302**

**Radius: 12.0**

**Diameter: 24.0**

**Perimeter: 75.39822368615503**

**Area: 452.3893421169302**