

Class Circle

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```
1  /**
2   * A Circle is a Shape that maintains information about its radius. A
3   * Circle knows how to return its radius, set its radius, calculate and
4   * return its area, and calculate and return its circumference.
5   *
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8   * @teacher    Coglianese
9   * @period    2
10  * @version    23 February 2018
11  */
12  public class Circle extends Shape
13  {
14      private double myRadius;
15
16      /**
17       * Constructs a circle with initial radius specified by x.
18       * @param x    initial radius
19       */
20      public Circle(double x)
21      {
22          myRadius = x;
23      }
24
25      /**
26       * Returns the circle's radius
27       * @return    radius
28       */
29      public double getRadius()
30      {
31          return myRadius;
32      }
33
34      /**
35       * Sets the radius to the input number.
36       * @param x    assigns x to myRadius
37       */
38      public void setRadius(double x)
39      {
40          myRadius = x;
41      }
42
43      /**
44       * Calculates and returns the circle's area.
45       * @return    area
46       */
47      public double findArea()
48      {
49          return myRadius*myRadius*Math.PI;
```

```
50     }
51
52     /**
53      * Calculates and returns the circle's circumference.
54      * @return    circumference
55      */
56     public double findCircumference()
57     {
58         return 2*Math.PI*myRadius;
59     }
60 }
```