

```
1 import java.io.*;
2 /**
3  * Driver for Lab06. Test constructors and methods of Circle, Rectangle,
4  * Square, and Triangle classes and prints results in an output data
5  * file.
6  *
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9  * @teacher Coglianese
10 * @period
11 * @version 23 February 2018
12 */
13 public class Driver06
14 {
15     public static void main(String[] args) throws Exception
16     {
17         System.setOut(new PrintStream(new FileOutputStream(
18             "output.txt")));
19
20         //create the objects
21         Circle c = new Circle(75);
22         Rectangle r = new Rectangle(30.0, 40.);
23         Square s = new Square(50.0);
24         Triangle t = new Triangle(37);
25
26         //test the instance methods
27         System.out.println("Circle");
28         System.out.println("-----");
29         System.out.println("Radius: " + c.getRadius());
30         System.out.println("Area: " + c.findArea());
31         System.out.println("Circumference: " + c.findCircumference());
32         System.out.println();
33
34         System.out.println("Rectangle");
35         System.out.println("-----");
36         System.out.println("Base: " + r.getBase());
37         System.out.println("Height: " + r.getHeight());
38         System.out.println("Area: " + r.findArea());
39         System.out.println("Perimeter: " + r.findPerimeter());
40         System.out.println("Diagonal: " + r.findDiagonal());
41         System.out.println();
42
43         System.out.println("Square");
44         System.out.println("-----");
45         System.out.println("Side Length: " + s.getSide());
46         System.out.println("Area: " + s.findArea());
47         System.out.println("Perimeter: " + s.findPerimeter());
48         System.out.println("Diagonal: " + s.findDiagonal());
49         s.setSide(10.0);
```

```
50         System.out.println("New side: " + s.getSide());
51         System.out.println("New area: " + s.findArea());
52         System.out.println();
53
54         System.out.println("Triangle");
55         System.out.println("-----");
56         System.out.println("Side Length: " + t.getSide());
57         System.out.println("Area: " + t.findArea());
58         System.out.println("Perimeter: " + t.findPerimeter());
59         t.setSide(10.0);
60         System.out.println("New side: " + t.getSide());
61         System.out.println("New area: " + t.findArea());
62         System.out.println();
63
64     }
65 }
```