**Rectangle**

**Red Rectangle**

**12.0**

**34.0**

**Rectangle**

**Square**

**12.0**

**12.0**

**Triangle**

**Right Triangle**

**3.0**

**4.0**

**5.0**

**Triangle**

**Right Triangle**

**3.0**

**4.0**

**1.0**

**Circle**

**Red Circle**

**2.5**

**Circle**

**Green Circle**

**3.6**

**Circle circle1 = (Circle) shapes.get(0);**

**Circle circle2 = (Circle) shapes.get(2);**

**System.out.println(circle1.name + circle1.getRadius());**

**System.out.println(circle2.name + circle2.getRadius());**

**// else if (input.nextLine().equals("Rectangle")) {**

**// } else if (input.nextLine().equals("Triangle")) {**

**// }**

**public static void a() {**

**Rectangle rec1 = new Rectangle();**

**Rectangle rec2 = new Rectangle("Rectangle", 1.0, 1.0);**

**String str1 = new String();**

**System.out.println(rec1.equals(rec2));**

**System.out.println(rec1.equals(str1));**

**System.out.println(rec1.toString());**

**rec1.setName("rec1");**

**rec1.setLength(2.0);**

**rec1.setWidth(2.0);**

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

**System.out.println(rec1.getName());**

**System.out.println(rec1.getLength());**

**System.out.println(rec1.getWidth());**

**System.out.println(rec1.area());**

**System.out.println(rec1.equals(rec2));**

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

**Circle cir1 = new Circle();**

**Circle cir2 = new Circle();**

**System.out.println(cir1.equals(cir2));**

**System.out.println(cir1.equals(str1));**

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

**System.out.println(cir1.toString());**

**cir1.setName("cir1");**

**cir1.setRadius(2.0);**

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

**System.out.println(cir1.getName());**

**System.out.println(cir1.getRadius());**

**System.out.println(cir1.area());**

**System.out.println(rec1.equals(rec2));**

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

**Triangle tri1 = new Triangle();**

**Triangle tri2 = new Triangle();**

**System.out.println(tri1.equals(tri2));**

**System.out.println(tri1.equals(str1));**

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

**System.out.println(tri1.toString());**

**tri1.setName("cir");**

**tri1.setSideOne(3.0);**

**tri1.setSideTwo(4.0);**

**tri1.setSideThree(5.0);**

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

**System.out.println(tri1.getName());**

**System.out.println(tri1.getSideOne());**

**System.out.println(tri1.getSideTwo());**

**System.out.println(tri1.getSideThree());**

**System.out.println(tri1.area());**

**System.out.println(tri1.equals(rec2));**

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

**}**

**}**

