```java
package basicExample;

import static org.junit.jupiter.api.Assertions.*;

import java.io.ByteArrayInputStream;
import java.io.ByteArrayOutputStream;
import java.io.PrintStream;

import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.Test;

class CircleRediusTest {

        //test when the radius is 1
        @Test
        void testmain() {
                String input="1\n";


                ByteArrayInputStream in=new
ByteArrayInputStream(input.getBytes());
                System.setIn(in);

                ByteArrayOutputStream out=new ByteArrayOutputStream();
                System.setOut(new PrintStream(out));

                String[] args={};
                CircleRedius.main(args);

                String consoleOutput="Enter the radius
"+System.getProperty("line.separator");
                consoleOutput+="For a circle with radius
1.0,"+System.getProperty("line.separator");
                consoleOutput+="The circumference is
6.283185307179586"+System.getProperty("line.separator");
                consoleOutput+="and the area is
3.141592653589793."+System.getProperty("line.separator");

                assertEquals(consoleOutput,out.toString());


        }
        //test when the radius is 3, radius 3, circumference
18.849555921539, area   28.274333882308

        @Test
        void testmain2() {
                String input="3\n";


                ByteArrayInputStream in=new
ByteArrayInputStream(input.getBytes());
                System.setIn(in);

                ByteArrayOutputStream out=new ByteArrayOutputStream();
                System.setOut(new PrintStream(out));
```

```java
				String[] args={};
				CircleRedius.main(args);

				String consoleOutput="Enter the radius
"+System.getProperty("line.separator");
				consoleOutput+="For a circle with radius
3.0,"+System.getProperty("line.separator");
				consoleOutput+="The circumference is
18.84955592153876"+System.getProperty("line.separator");
				consoleOutput+="and the area is
28.274333882308138."+System.getProperty("line.separator");

				assertEquals(consoleOutput,out.toString());


		}
		//test when the radius is 0, radius 0, circum 0, area 0

		//test when the radius -1, an error message should displayed
		@Test
		void testmain4() {
				String input="-1\n";


				ByteArrayInputStream in=new
ByteArrayInputStream(input.getBytes());
				System.setIn(in);

				ByteArrayOutputStream out=new ByteArrayOutputStream();
				System.setOut(new PrintStream(out));

				String[] args={};
				CircleRedius.main(args);

				String consoleOutput="Enter the radius
"+System.getProperty("line.separator");
				consoleOutput+="You have entered wrong
value."+System.getProperty("line.separator");;

				assertEquals(consoleOutput,out.toString());


		}
		//test  when the radius is abc, an error massage will be
displayed

}
```