

```
package za.ac.wsu.s212041711;
```

```
public class circle{  
    private int x;  
    private int y;  
    private double radius;  
  
    public double area,circumference,diameter;  
  
    public void setradius(int num1,int num2){  
        radius = Math.sqrt(num1*num1 + num2*num2);  
    }  
    public double getradius(){  
        return radius;  
    }  
    public void setarea(double number){  
        area = Math.PI*(radius*radius);  
    }  
    public void setcircumference(double number){  
        circumference = Math.PI*2*radius;  
    }  
    public void setdiameter(double number){  
        diameter = 2*radius;  
    }  
    public double getarea(){  
        return area;  
    }  
    public double getcircumference(){  
        return circumference;  
    }  
    public double getdiameter(){
```

```
    return diameter;
}
```

```
public static void main(String[] args){
```

```
    circle c1 = new circle();
    c1.setarea(2.23);
    c1.setcircumference(2.23);
    c1.setdiameter(2.23);
    circle c2 = new circle();
    c2.setarea(5.00);
    c2.setcircumference(5.00);
    c2.setdiameter(5.00);
    circle c3 = new circle();
    c3.setarea(7.81);
    c3.setcircumference(7.81);
    c3.setdiameter(7.81);
```

```
    System.out.println("area = " + c1.getarea() + "\ncircumference = " + c1.getcircumference() +
"\ndiameter = " + c1.getdiameter());
```

```
    System.out.println("area = " + c2.getarea() + "\ncircumference = " + c2.getcircumference() +
"\ndiameter = " + c2.getdiameter());
```

```
    System.out.println("area = " + c3.getarea() + "\ncircumference = " + c3.getcircumference() +
"\ndiameter = " + c3.getdiameter());
```

```
    }
}
```