

```

import java.util.Scanner;
abstract class Shape{
    int d1,d2;
    Shape(){}
    Shape(int a,int b)
    {
        d1=a;
        d2=b;
    }
    abstract void printArea();
}

class Rectangle extends Shape{
    Rectangle(int a,int b)
    {
        super(a,b);
    }

    void printArea()
    {
        System.out.println("The area of the Rectangle is : "+(d1*d2));
    }
}

class Triangle extends Shape{
    Triangle(int a,int b)
    {
        super(a,b);
    }

    void printArea()
    {
        System.out.println("The area of the Triangle is : "+(0.5*d1*d2));
    }
}

class Circle extends Shape{
    Circle(int r)
    {
        d1=r;
    }

    void printArea()
    {
        System.out.println("The area of the Circle is : "+(3.14*d1*d1));
    }
}

public class shapem {
    public static void main(String args[])
    {
        Scanner scr = new Scanner(System.in);
        System.out.println("Enter radius of the Circle : ");
        int a = scr.nextInt();
        Circle c = new Circle(a);
        System.out.println("Enter the dimensions of the Rectangle : ");
        a = scr.nextInt();
        int b= scr.nextInt();
        Rectangle r = new Rectangle(a,b);
        System.out.println("Enter the dimensions of the Triangle : ");
        a = scr.nextInt();
        b = scr.nextInt();
        Triangle t = new Triangle(a,b);
        c.printArea();
    }
}

```

```
        r.printArea();  
        t.printArea();  
    }  
}
```

Output :

```
Enter radius of the Circle :  
5  
Enter the dimensions of the Rectangle :  
4  
5  
Enter the dimensions of the Triangle :  
3  
4  
The area of the Circle is : 78.5  
The area of the Rectangle is : 20  
The area of the Triangle is : 6.0
```

```
Enter radius of the Circle :  
5  
Enter the dimensions of the Rectangle :  
4  
5  
Enter the dimensions of the Triangle :  
3  
4  
The area of the Circle is : 78.5
```