

```

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);
    }
}

```


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```
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 * d2));  
}
```

```
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 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();
}
}

```