

```

import java.util. Scanner;
abstract class shape
{
    private int a, b;
    void setshape (int x, int y)
    {
        a = x;
        b = y;
        int geta()
        {
            return a;
        }
        int getb()
        {
            return b;
        }
    }
}

```

```

abstract public void print_area ( );
}

```

```

class rectangle extends shape
{
    private int area_rect;
    rectangle (int x, int y)
    {
        set shape (x, y);
    }
}

```

```

public void print_area ( )
{
    area_rect = geta() * getb();
}

```



```
System.out.println ("Area of rectangle is : " + area-  
rect);  
}  
}
```

```
class triangle extends shape  
{
```

```
    private double area_tri;
```

```
    triangle (int x, int y)
```

```
    {  
        setshape (x, y);
```

```
    }
```

```
    public void print_area()
```

```
    {  
        area_tri = (geta() * get(b)) / 2 ;
```

```
        System.out.println ("The area of triangle is : "  
                                + area_tri);
```

```
    }
```

```
}
```

```
class circle extends shape
```

```
{  
    private double area_circle;
```

```
    circle (int y)
```

```
    {  
        setshape (0, y);
```

```
    }
```

```
    public void print_area()
```

```
    {  
        area_circle = (3.14) * getb() * getb();
```

```
        System.out.println ("Area of circle is : " + area-  
                                circle);
```

```
    }
```



```

public class Main
{
    public static void main (String[] args) {
        Scanner xx = new Scanner (System.in);
        int a, b;
        System.out.println ("Enter the length of rectangle:");
        a = xx.nextInt();
        System.out.println ("Enter the breadth of rectangle:");
        b = xx.nextInt();
        rectangle r = new rectangle (a, b);
        r.print_area();
        System.out.println ("Enter the height of triangle:");
        a = xx.nextInt();
        System.out.println ("Enter the base of triangle:");
        b = xx.nextInt();
        triangle t = new triangle (a, b);
        t.print_area();
        System.out.println ("Enter the radius of circle:");
        a = xx.nextInt();
        circle c = new circle (a);
        c.print_area();
    }
}

```