

lab 7

PAPER SOFT

Date: \_\_\_\_\_

Page: \_\_\_\_\_

```
import java.util.Scanner
```

```
abstract class Shape
```

```
{
```

```
    int a;
```

```
    int b;
```

```
    abstract void printArea();
```

```
    public Shape(int a, int b) {
```

```
        this.a = a;
```

```
        this.b = b;
```

```
    }
```

```
}
```

```
class Rectangle extends Shape
```

```
{
```

```
    public Rectangle(int a, int b) {
```

```
        super(a, b);
```

```
    }
```

```
    void printArea()
```

```
{
```

```
        System.out.println("Area of rectangle: " + (a * b));
```

```
}
```



}

```
Class Triangle extends Shape  
{
```

```
    public Triangle(int a, int b) {  
        super(a, b);  
    }
```

```
    void printArea() {  
        System.out.println("Area of triangle: " +  $\frac{(a * b)}{2}$ );  
    }  
}
```

```
Class Circle extends Shape  
{
```

```
    public Circle(int a, int b) {  
        super(a, b);  
    }
```

```
    void printArea() {  
        System.out.println("Area of Circle: " +  $(3.142 * a * b)$ );  
    }  
}
```



```
Class Prog7 {
```

```
    Public Static Void main(String[] args) {
```

```
        Scanner SC = new Scanner(System.in)
```

```
        System.out.print("Enter length of rectangle: ");
```

```
        int l-rec = SC.nextInt();
```

```
        System.out.print("Enter breadth of rectangle: ");
```

```
        int b-rec = SC.nextInt();
```

```
        System.out.print("Enter height of triangle: ");
```

```
        int h-tri = SC.nextInt();
```

```
        System.out.print("Enter base of triangle: ");
```

```
        int b-tri = SC.nextInt();
```

```
        System.out.print("Enter radius of Circle: ");
```

```
        int r-cr = SC.nextInt();
```

```
        Rectangle r = new Rectangle(l-rec, b-rec);
```

```
        Triangle t = new Triangle(h-tri, b-tri);
```

```
        Circle c = new Circle(r-cr, r-cr);
```

```
        System.out.println("-----");
```

```
        r.PrintArea();
```

```
        t.PrintArea();
```

```
        c.PrintArea();
```

```
    }
```

```
}
```