Develop a Java program to create an abstract class named Shape that contains two integers and an empty method named printArea( ). Provide three classes named Rectangle, Triangle and Circle such that each one of the classes extends the class Shape. Each one of the classes contain only the method printArea( ) that prints the area of the given shape.

```
import java.util.*; abstract class a{
double x,y;     a(double i,double j){
x=i;y=j;
    }
    abstract double area();
}
class rect extends a{     rect(double i,double j){
super(i,j);
    }
    double area(){         return x*y;
    } }
class tri extends a{     tri(double i,double j){
super(i,j);
    }
    double area(){         return
0.5*x*y;
    } } class cir extends a{
cir(double i){         super(i,i);
    }
    double area(){         return
3.14*x*y;
    } }
class abst_class{
    public static void main(String args[]){

        Scanner sc=new Scanner(System.in);
        System.out.println("ENTER LENGTH AND BREADTH");         double
l=sc.nextInt();         double b=sc.nextInt();         rect r=new rect(l,b);

        System.out.println("ENTER HEIGHT AND BASE");         double
h=sc.nextInt();         double ba=sc.nextInt();         tri t=new tri(h,ba);

        System.out.println("ENTER RADIUS");         double
ra=sc.nextInt();         cir c=new cir(ra);


        System.out.println("Area of rectangle is "+r.area());
```

```
        System.out.println("Area of triangle is "+t.area());
        System.out.println("Area of circle is "+c.area());
    }
}
```

Output

```
ENTER LENGTH AND BREADTH
4 5
ENTER HEIGHT AND BASE
5 7
ENTER RADIUS
4
Area of rectangle is 20.0
Area of triangle is 17.5
Area of circle is 50.24
```