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.

```java
import java.util.Scanner;

// Abstract class
abstract class Shape {
    int dim1, dim2;

    // Constructor
    Shape(int dim1, int dim2) {
        this.dim1 = dim1;
        this.dim2 = dim2;
    }

    // Abstract method (to be implemented in subclasses)
    abstract void printArea();
}

// Rectangle class
class Rectangle extends Shape {
    Rectangle(int length, int breadth) {
        super(length, breadth);
    }

    void printArea() {
        double area = dim1 * dim2;
        System.out.println("Area of Rectangle: " + area);
    }
}
```

```java
// Triangle class
class Triangle extends Shape {
    Triangle(int base, int height) {
        super(base, height);
    }

    void printArea() {
        double area = 0.5 * dim1 * dim2;
        System.out.println("Area of Triangle: " + area);
    }
}

// Circle class
class Circle extends Shape {
    Circle(int radius) {
        super(radius, 0); // second dimension unused
    }

    void printArea() {
        double area = 3.14159 * dim1 * dim1;
        System.out.println("Area of Circle: " + area);
    }
}
```

```java
// Main class
public class shapedemo{
    Run | Debug
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        // Rectangle
        System.out.print(s: "Enter length and breadth of rectangle: ");
        int l = sc.nextInt();
        int b = sc.nextInt();
        Shape rect = new Rectangle(l, b);
        rect.printArea();

        // Triangle
        System.out.print(s: "\nEnter base and height of triangle: ");
        int base = sc.nextInt();
        int height = sc.nextInt();
        Shape tri = new Triangle(base, height);
        tri.printArea();

        // Circle
        System.out.print(s: "\nEnter radius of circle: ");
        int r = sc.nextInt();
        Shape cir = new Circle(r);
        cir.printArea();

        sc.close();
    }
```

```
Enter length and breadth of rectangle: 8 4
Area of Rectangle: 32.0

Enter base and height of triangle: 4 5
Area of Triangle: 10.0

Enter radius of circle: 2
Area of Circle: 12.56636
```