

A) Abstract classes and methods:

```
abstract class Shape {
    abstract double calculateArea();
}

class Circle extends Shape {
    double radius;

    public Circle(double radius) {
        this.radius = radius;
    }

    @Override
    double calculateArea() {
        return Math.PI * radius * radius;
    }
}

class Rectangle extends Shape {
    double length;
    double width;

    public Rectangle(double length, double width) {
        this.length = length;
        this.width = width;
    }

    @Override
    double calculateArea() {
        return length * width;
    }
}

public class Main {
    public static void main(String[] args) {
        Circle circle = new Circle(5);
        Rectangle rectangle = new Rectangle(4, 6);

        System.out.println("Area of Circle: " + circle.calculateArea());
        System.out.println("Area of Rectangle: " +
rectangle.calculateArea());
    }
}
```

B) interfaces

```
interface Shape {  
    double calculateArea();  
}
```

```
class Circle implements Shape {  
    double radius;
```

```
    public Circle(double radius) {  
        this.radius = radius;  
    }
```

```
    @Override
```

```
    public double calculateArea() {  
        return Math.PI * radius * radius;  
    }
```

```
}
```

```
class Rectangle implements Shape {  
    double length;  
    double width;
```

```
    public Rectangle(double length, double width) {  
        this.length = length;  
        this.width = width;  
    }
```

```
    @Override
```

```
    public double calculateArea() {  
        return length * width;  
    }
```

```
}
```

```
public class Main {
```

```
    public static void main(String[] args) {  
        Circle circle = new Circle(5);  
        Rectangle rectangle = new Rectangle(4, 6);
```

```
        System.out.println("Area of Circle: " + circle.calculateArea());
```

```
        System.out.println("Area of Rectangle: " + rectangle.calculateArea());
```

```
    }
```

```
}
```