

```
package classes;

public class Triangle extends GeometricObject {

    public Triangle() {
        this.side1 = 1;
        this.side2 = 2;
        this.side3 = 3;
    }

    public Triangle(double side1, double side2, double side3) {
        this.side1 = side1;
        this.side2 = side2;
        this.side3 = side3;
    }

    @Override
    public double getArea() {
        double s = 0.5 * (this.side1 + this.side2 + this.side3);
        return Math.sqrt(s * ((s - this.side1) * (s - this.side2) * (s - this.side3)));
    }

    @Override
    public double getPerimeter() {
        return this.side1 + this.side2 + this.side3;
    }

    @Override
    public String toString() {
        return "Triangle: side1 = " + this.side1 + " side2 = " + this.side2 + " side3 = " + this.side3;
    }

    public void display() {
        System.out.println("Triangle:");
        System.out.println("\t- Area: " + this.getArea());
        System.out.println("\t- Perimeter: " + this.getPerimeter());
        System.out.println("\t- Color: " + this.getColor());
        System.out.println("\t- Filled: " + this.isFilled());
    }

    private final double side1;
    private final double side2;
    private final double side3;

    public double getSide1() {
        return side1;
    }

    public double getSide2() {
        return side2;
    }

    public double getSide3() {
        return side3;
    }
}
```