

27. Write Java methods to calculate triangle area.

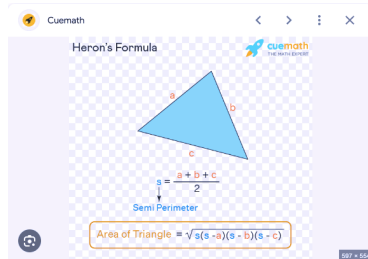
Expected Output:

Input Side-1: 10

Input Side-2: 15

Input Side-3: 20

The area of the triangle is 72.6184377413890



```
import java.util.Scanner;

public class Exercise27 {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Input Side-1: ");
        double side1 = scanner.nextDouble();

        System.out.print("Input Side-2: ");
        double side2 = scanner.nextDouble();

        System.out.print("Input Side-3: ");
        double side3 = scanner.nextDouble();

        double area = calculateTriangleArea(side1, side2, side3);

        System.out.println("The area of the triangle is " + area);

        scanner.close();
    }

    public static double calculateTriangleArea(double side1, double side2, double
side3) {
        // Heron's formula to calculate the area of a triangle
        double s = (side1 + side2 + side3) / 2;
        double area = Math.sqrt(s * (s - side1) * (s - side2) * (s - side3));
        return area;
    }
}
```