

**EquilateralPyramid.java**

```
1 public class EquilateralPyramid extends Shape implements Volume {
2     private double baseSide, height;
3
4     public EquilateralPyramid(double baseSide, double height) {
5         super("Equilateral Pyramid");
6         this.baseSide = baseSide;
7         this.height = height;
8     }
9
10    @Override
11    public double calculateArea() {
12        double baseArea = baseSide * baseSide;
13        double slantHeight = Math.sqrt((baseSide / 2) * (baseSide / 2) + height *
height);
14        double lateralArea = 2 * baseSide * slantHeight;
15        return baseArea + lateralArea;
16    }
17
18    @Override
19    public double calculatePerimeter() {
20        return 4 * baseSide;
21    }
22
23    @Override
24    public double calculateVolume() {
25        return (1.0 / 3.0) * baseSide * baseSide * height;
26    }
27 }
28
```