

Cylinder.java

```
1 public class Cylinder extends Circle { // Save as "Cylinder.java"
2     private double height; // private variable
3
4     // Constructor with default color, radius and height
5     public Cylinder() {
6         super();
7         this.height = 1.0;
8     }
9
10    // Constructor with default radius, color but given height
11    public Cylinder(double height) {
12        super(); // call superclass no-arg constructor Circle()
13        this.height = height;
14    }
15
16    // Constructor with default color, but given radius, height
17    public Cylinder(double radius, double height) {
18        super(radius); // call superclass constructor Circle(r)
19        this.height = height;
20    }
21
22    // A public method for retrieving the height
23    public double getHeight() {
24        return height;
25    }
26
27    // A public method for computing the volume of cylinder
28    // use superclass method getArea() to get the base area
29    public double getVolume() {
30        return getArea()*height;
31    }
32 }
33
```