

# Solution Review: Implement and Override Method

This review provides a detailed analysis to solve the 'Implement and Override the Method in the Derived Class' challenge.

## We'll cover the following ^

- Solution
- Explanation

## Solution #

```
1 // Base Class
2 class Shape {
3
4     // Private Data Members
5     private double area;
6
7     public Shape() { // Default Constructor
8         area = 0;
9     }
10
11     // Getter Function
12     public double getArea() {
13         return area;
14     }
15 }
16
17 // Derived Class
18 class Circle extends Shape {
19
20     private double radius;
21
22     public Circle(double radius) {
23         this.radius = radius;
24     }
25
26     // Overridden Method the getArea()
27
28     public double getArea() {
29         return (radius*radius) * 3.14;
30     }
31 }
```



## Explanation #

The solution is very simple.

- **Line 29 - 31:** The `getArea()` method is overridden in the `Circle` class to calculate the area of the circle.
- The area is calculated using the conventional formula:

$$\pi * radius^2$$