

Week 8

Shape.java

```
import java.util.Scanner;
abstract class Shape {
    int int1, int2;
    abstract double printArea();
}
class Rectangle extends Shape {
    Rectangle(int a, int b) {
        int1 = a;
        int2 = b;
    }
    double printArea() {
        System.out.println("For Rectangle ");
        return int1 * int2;
    }
}
class Triangle extends Shape {
    Triangle(int a, int b) {
        int1 = a;
        int2 = b;
    }
    double printArea() {
```

```
System.out.println("For Triangle ");  
return (int1 * int2) / 2;
```

```
}
```

```
}
```

```
class circle extends shape {
```

```
circle(int a) {
```

```
int1 = a;
```

```
}
```

```
double printArea() {
```

```
System.out.println("For circle ");
```

```
return 3.14 * int1 * int1;
```

```
}
```

```
}
```

```
class shapeMain {
```

```
public static void Main(String args[]) {
```

```
Rectangle r = new Rectangle(10, 20);
```

```
Triangle T = new Triangle(20, 30);
```

```
circle c = new circle(35);
```

```
System.out.println("Area of Rectangle is: " + r.printArea());
```

```
System.out.println("Area of triangle is: " + t.printArea());
```

```
System.out.println("Area of circle is: " + c.printArea());
```

```
}
```

```
}
```