

```

public /*A) Provide the rest of the code create class Shape*/ {
    /*B) Declare method area() to compute the area of a Shape*/

    /*C) Write the code for private Class Shape3D, which has a public
method volume() to compute the volume of a Shape3D*/

    /*D) Write the code for private Class Shape2D, which has no
method*/

    static class Sphere extends Shape3D {
        double r;
        Sphere (double r){
            /*E) Provide appropriate code for this line*/
        }

        public double area() {
            return /*F) Provide appropriate code to complete this
line*/
        }

        /*Insert the code to compute the volume*/

        /*Insert code for the toString() method*/
    }

    static class RectPrism extends Shape3D {
        double l,w,h;
        RectPrism (double l, double w, double h){
            /*Insert appropriate code to complete the constructor*/
        }
        /*Insert below, the code to compute the area*/

        /*Insert below, the code to compute the volume*/

        /*Insert code for the toString() method*/
    }

    static class Square extends Shape2D {
        double l;
        /*Insert below, the code to for the constructor*/

        /*Insert below, the code to for the computation of the area*/

        /*Insert below, the code to for the toString() method*/
    }

    static class Rectangle extends Shape2D {
        double l,w;
        /*Insert below, the code to for the constructor*/

        /*Insert below, the code to for the computation of the area*/

        /*Insert below, the code to for the toString() method*/
    }

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}

public static void main(String[] args) {
    /*Insert below, the code to create the following objects:
    sphere with radius 5.5
    rprism with length 5, width 2, and height 3
    square with length 3.5
    rectangle with length 3.5 and width 4, respectively from the
classes Sphere, RectPrism, Square, Rectangle*/

    System.out.println(sphere);
    System.out.println(rprism);
    System.out.println(square);
    System.out.println(rectangle);
}
}
```