

Question 5:

```
class Polygon {
    public static int area(int side) {
        return side * side;
    }

    public static double area(double radius) {
        return 3.14 * radius * radius;
    }

    public static int area(int length, int width) {
        return length * width;
    }
}

public class Lab03Q5 {
    public static void main(String[] args) {
        int side = 10;
        System.out.println("side = " + side);
        int areaSquare = Polygon.area(side);
        System.out.println("area = " + areaSquare);

        double radius = 6.5;
        System.out.println("radius = " + radius);
        double areaCircle = Polygon.area(radius);
        System.out.println("area = " + areaCircle);

        int length = 5;
        int width = 4;
        System.out.println("length = " + length + ", width = " + width);
        int areaRect = Polygon.area(length, width);
        System.out.println("area = " + areaRect);
    }
}
```

Output:

```
side = 10
area = 100
radius = 6.5
area = 132.665
length = 5, width = 4
area = 20
```

Question 6:

```
class Rectangle {
    int lenght;
    int width;

    Rectangle() {
        lenght = 0;
        width = 0;
    }

    Rectangle(int lenght, int width) {
        this.lenght = lenght;
        this.width = width;
    }

    int area() {
        return lenght * width;
    }
}

public class Lab03Q6 {
    public static void main(String[] args) {
        Rectangle r1 = new Rectangle();
        System.out.println("Area of rectangle 1: " + r1.area());

        Rectangle r2 = new Rectangle(5, 3);
        System.out.println("Area of rectangle 2: " + r2.area());
    }
}
```

Outpt:

```
Area of rectangle 1: 0
Area of rectangle 2: 15
```