

abstract class shape {

double x;

double y;

shape (double x, double y) {

this.x = x;

this.y = y;

}

abstract double printArea();

}

class circle extends shape {

circle (double x, double y) {

super (x, y);

}

double printArea() {

System.out.println ("Area of circle : ");

return (3.14 * x * x);

}

}

class triangle extends shape {

triangle (double x, double y) {

super (x, y);

}

double printArea() {

System.out.println ("Area of triangle : ");

return (x * y) / 2;

}

}

```

class rectangle extends shape {
    rectangle (double x, double y) {
        super (x, y)
    }
    double printArea () {
        system.out.println ("Area of rectangle: ");
        return (3.14 * x * x);
    }
}

```

```

class shape demo {
    public static void main (String args []) {
        circle c = new circle (10, 16);
        rectangle r = new rectangle (10, 20);
        triangle t = new triangle (12, 14);
        shape s;
        s = c;
        system.out.println ("Area = " + c.printArea());
        s = r;
        system.out.println ("Area = " + r.printArea());
        s = t;
        system.out.println ("Area = " + t.printArea());
    }
}

```