

```
import java.util.Date;

public abstract class GeometricObject implements Comparable<GeometricObject> {
    private String color;
    private boolean filled;
    private Date dateCreated = new Date();

    protected GeometricObject() {
    }

    protected GeometricObject(String color, boolean filled) {
        this.color = color;
        this.filled = filled;
    }

    public String getColor() {
        return this.color;
    }

    public void setColor(String color) {
        this.color = color;
    }

    public boolean isFilled() {
        return this.filled;
    }

    public void setFilled(boolean filled) {
        this.filled = filled;
    }

    public Date getDateCreated() {
        return this.dateCreated;
    }

    @Override
    public String toString() {
        return "[" +
            "dateCreated=" + getDateCreated() +
            " ]";
    }

    public abstract double getArea();

    public abstract double getPerimeter();
}
```

```
@Override
public int compareTo(GeometricObject o) {
    if (this.getArea() == o.getArea()) {
        return 0;
    }
    else if (this.getArea() > o.getArea()) {
        return 1;
    }
    else {
        return -1;
    }
}

public static GeometricObject max(GeometricObject o1, GeometricObject o2) {
    if(o1.compareTo(o2) == 1) {
        return o1;
    }
    else if(o1.compareTo(o2) == -1) {
        return o2;
    }
    else {
        return o1;
    }
}
}
```