```
import java.util.Date;
public abstract class 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() {
    public void setFilled(boolean filled) {
        this.filled = filled;
    public Date getDateCreated() {
        return this.dateCreated;
    @Override
    public String toString() {
            " color: " + getColor() +
            ", filled: " + isFilled() +
            ", dateCreated: " + getDateCreated() +
    public abstract double getArea();
    public abstract double getPerimeter();
```