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Software Development I - UML Diagrams

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Problem 13.1

Triangle
-side1: double -side2: double -side3: double
+ Triangle() + Triangle(double side1, double side2, double side3) + (double side1, double side2, double side3, String color, boolean filled) + getArea(): double + getPerimeter(): double + toString(): string

## GeometricObject

-color: string  
-filled: boolean  
-dateCreated: java.util.Date

+GeometricObject()  
+GeometricObject(String color, boolean filled)  
+getColor(): string  
+setColor(String color): void  
+isFilled(): boolean  
+setFilled(boolean filled): void  
+getDateCreated(): java.util.Date  
+toString(): string  
+getArea(): double  
+getPerimeter(): double

### Problem 13.5

GeometricObject2
<div>-color: string -filled: boolean -dateCreated: java.util.Date</div>
<div>+GeometricObject2() +GeometricObject2t(String color, boolean filled) +getColor(): string +setColor(String color): void +isFilled(): boolean +setFilled(boolean filled): void +getDateCreated():java.util.Date +toString():string + compareTo(GeometricObject2 o): int <u>+ GeometricObject2 max (GeometricObject2 o1, GeometricObject2 o2)</u> +getArea():double +getPerimeter():double</div>

### Problem 13.7

Colorable
-howToColor(): string

Square
-side: double
<div>+Square() +howToColor():String +Square(double newSide) +Square(double newSide,String color, boolean filled) +getSide():double +getArea():double +getPerimeter(): double +toString(): string</div>

## GeometricObject3

-color: string  
-filled: boolean  
-dateCreated: java.util.Date

+GeometricObject3()  
+GeometricObject3(String color, boolean filled)  
+getColor(): string  
+setColor(String color): void  
+isFilled(): boolean  
+setFilled(boolean filled): void  
+getDateCreated():java.util.Date  
+toString():string  
+ compareTo(GeometricObject3 o): int  
+getArea():double  
+getPerimeter():double

## Problem 13\_9

GeometricObject4
<div>-color: string -filled: boolean -dateCreated: java.util.Date</div>
<div>+GeometricObject4() +GeometricObject4(String color, boolean filled) +getColor(): string +setColor(String color): void +isFilled(): boolean +setFilled(boolean filled): void +getDateCreated():java.util.Date +toString():string compareTo(Circle1 circle1, Circle1 circle2): int +getArea():double +getPerimeter():double</div>

Circle
-radius: double
<pre> +Circle1() +Circle1(double radius) +Circle1(double radius, String color, boolean filled) +getRadius(): double +setRadius(double radius): void +getArea(): double +getPerimeter(): double +getDiameter(): double +compareTo(Circle1 o): int +equals(Object obj): boolean +toString():string </pre>

### Problem 13\_11

GeometricObject
<pre> -color: string -filled: boolean -dateCreated: java.util.Date </pre>
<pre> +GeometricObject() +GeometricObject(String color, boolean filled) +getColor(): string +setColor(String color): void </pre>

+isFilled(): boolean  
+setFilled(boolean filled): void  
+getDateCreated():java.util.Date  
+toString():string  
+getArea():double  
+getPerimeter():double

## Octagon

-side: double

+Octagon()  
+Octagon (double side)  
+setSide(double side): void  
+getSide(): double  
+getArea(): double  
+getPerimeter(): double  
+compareTo(Object o): int  
+toString(): string  
+clone(): object



