

Primitive Cheat Sheet

Object Class	Origin	Constructor	Draw	Fill
Line	Line Start	<code>Line newline = new Line(g, Color.Green, 1, 300, 300, 650, 650);</code>	<code>newline.Draw();</code>	N/A
Text	Upper Left Corner of the rectangle that contains the text	<code>Text text1 = new Text(g, "Hello World", Color.Green, 10, 10, 20);</code>	<code>text1.Draw();</code>	N/A
Arc	Upper Left Corner of the rectangle that contains the ellipse the arc would be a part of	<code>Arc arc1 = new Arc(g, Color.White, 1, 500, 500, 100, 100, 0, 90);</code>	<code>arc1.Draw();</code>	N/A
Circle	Centre of the Circle	<code>Circle cir1 = new Circle(g, Color.White, 3, 500, 500, 100);</code>	<code>cir1.Draw();</code>	<code>cir1.isFill = true; cir1.Draw();</code>
Rectangle	Upper Left Corner	<code>Rectangle rect1 = new Rectangle(g, Color.Wheat, 3, 500, 500, 250, 1000);</code>	<code>rect1.Draw();</code>	<code>rect1.isFill = true; rect1.Draw();</code>
Square	Upper Left Corner	<code>Square sqr1 = new Square(g, Color.Wheat, 3, 500, 500, 250);</code>	<code>sqr1.Draw();</code>	<code>sqr1.isFill = true; sqr1.Draw();</code>

General Constructors and Examples

Line

`Line(Graphics g, Color lineColor, int lineThickness, int lineX1, int lineY1, int lineX2, int lineY2)`

Example

```
//Creates and draws a 1-pixel Wide Line from (300, 300) to (650, 650)
Line newline = new Line(g, Color.Green, 1, 300, 300, 650, 650);
newline.Draw();
```

Text

`Text(Graphics g, String textContent, Color textColor, int textX1, int textY1, int textSize)`

Example

```
//Writes "Hello World" in green at (10, 10) with a 20 font size
Text text1 = new Text(g, "Hello World", Color.Green, 10, 10, 20);
text1.Draw();
```

Circle

```
Circle(Graphics g, Color cirColor, int cirThickness, int cirX1, int cirY1, int cirSize)
```

Example

```
//Draws a FILLED Light Blue Circle at (500, 500) with a 100-pixel radius
Circle cir1 = new Circle(g, Color.AliceBlue, 2, 500, 500, 100);
cir1.isFill = true;
cir1.Draw();
```

Arc

```
Arc(Graphics g, Color arcColor, int arcThickness, int arcX1, int arcY1, int arcWidth, int
arcHeight, int arcStartAngle, int arcEndAngle)
```

Example

```
//Draws an Elliptical Red Arc 5 pixels thick at (600, 600) for a 300x100 pixel ellipse
from 0 to 90 degrees
Arc arc1 = new Arc(g, Color.Red, 5, 600, 600, 300, 100, 0, 90);
arc1.Draw();
```

Rectangle

```
Rectangle(Graphics g, Color rectColor, int rectThickness, rectX1, int rectY1, int
rectWidth, int rectHeight)
```

Example

```
//Draws a 250x600 pixel rectangle with 3 pixel thickness at origin (0, 0)
Rectangle rect1 = new Rectangle(g, Color.Blue, 3, 0, 0, 250, 600);
rect1.Draw();
```

Shape

```
Shape shape = new Shape();
shape.Add(sqr1);
shape.Add(cir2);
shape.Add(rect3);
shape.Draw();
```

Note that in this Shape example, sqr1 will be the Root Primitive.