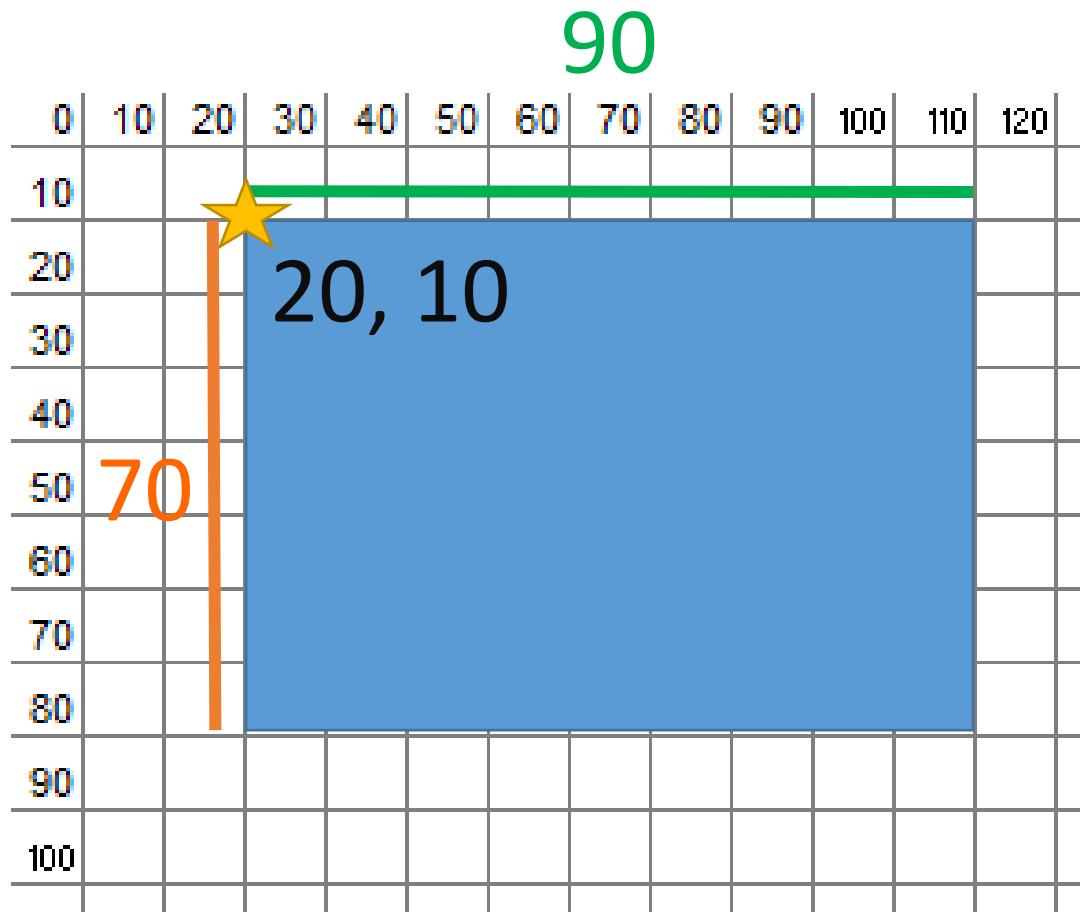
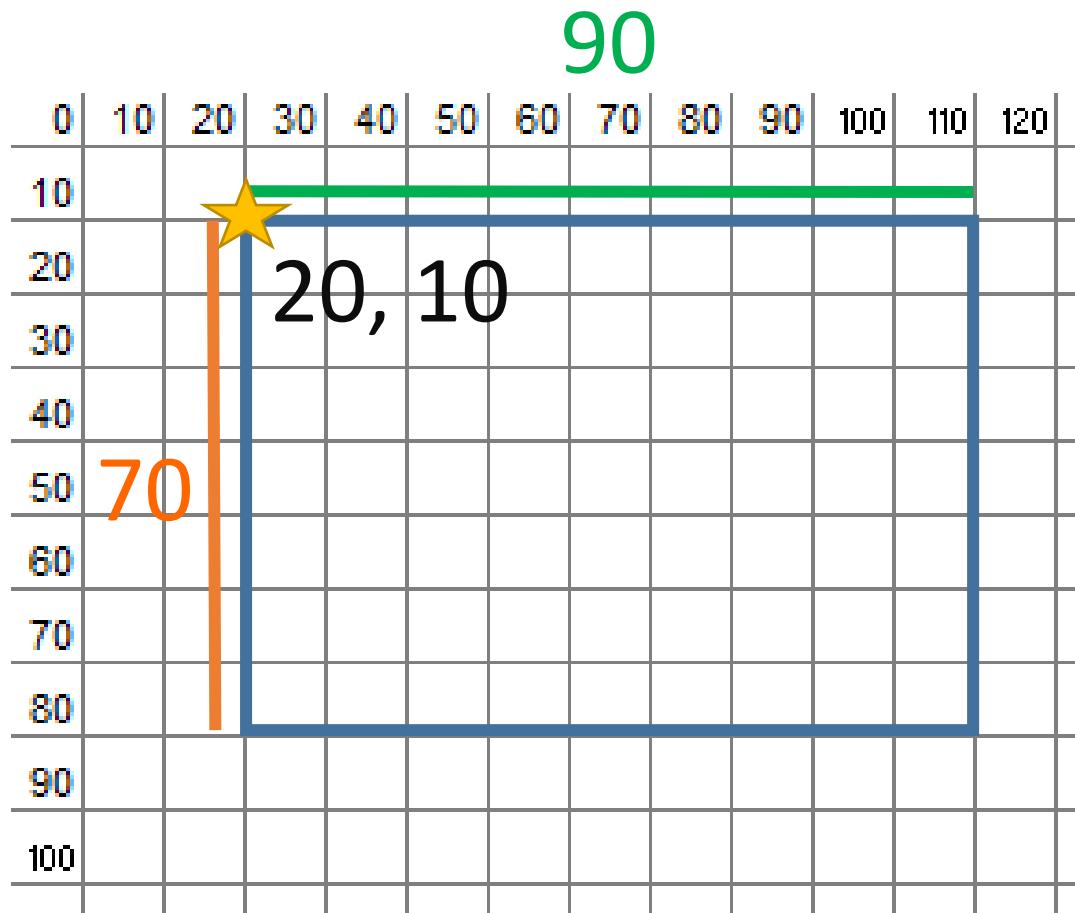


Ovals, Lines, Rectangles

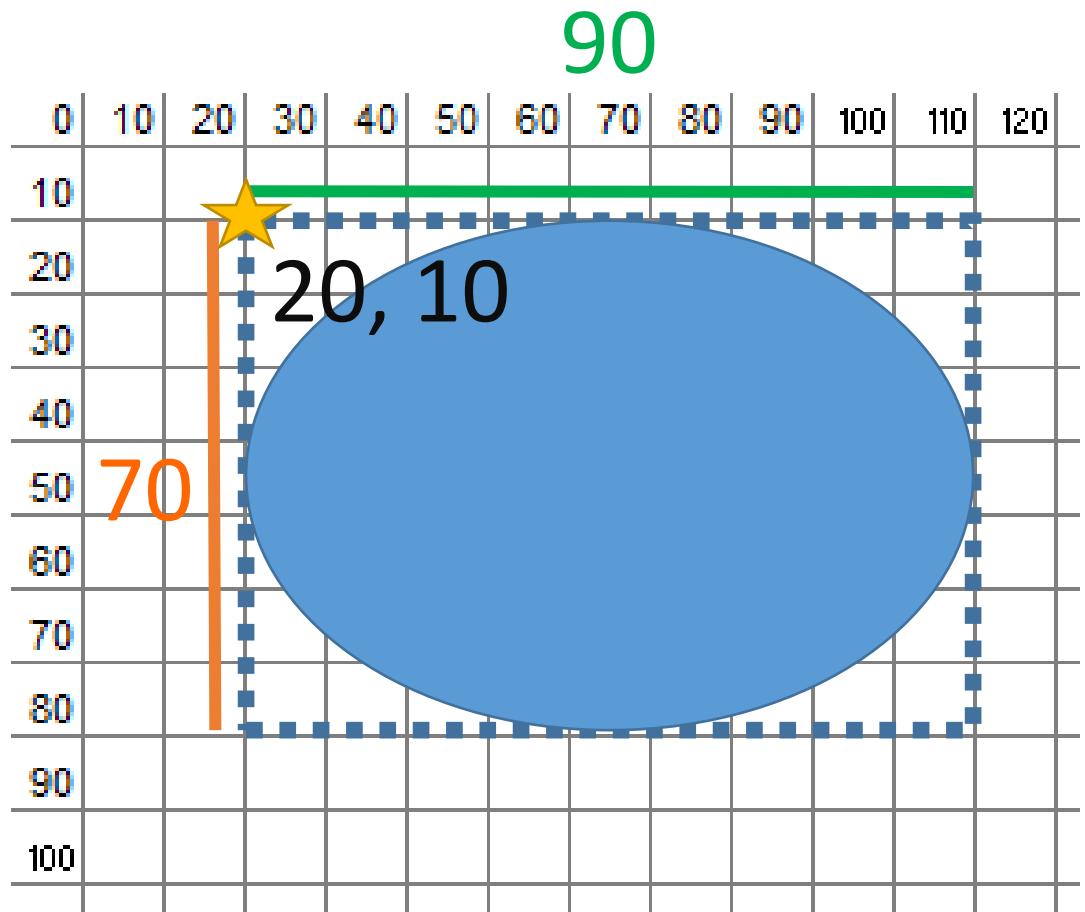
Drawing in Java



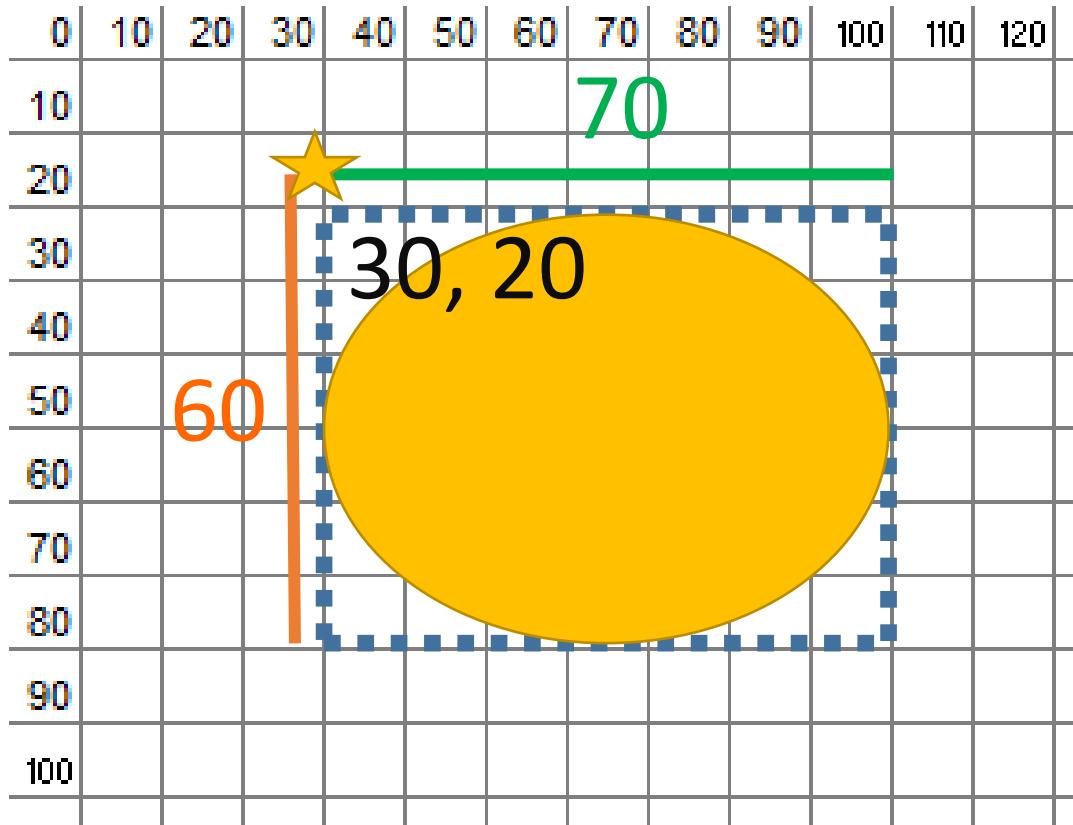
```
import java.applet.*;
import java.awt.*;
public class Rectangle extends Applet
{
    public void paint (Graphics g)
    {
        g.setColor(Color.blue);
        g.fillRect (20, 10, 90, 70);
    }
}
```



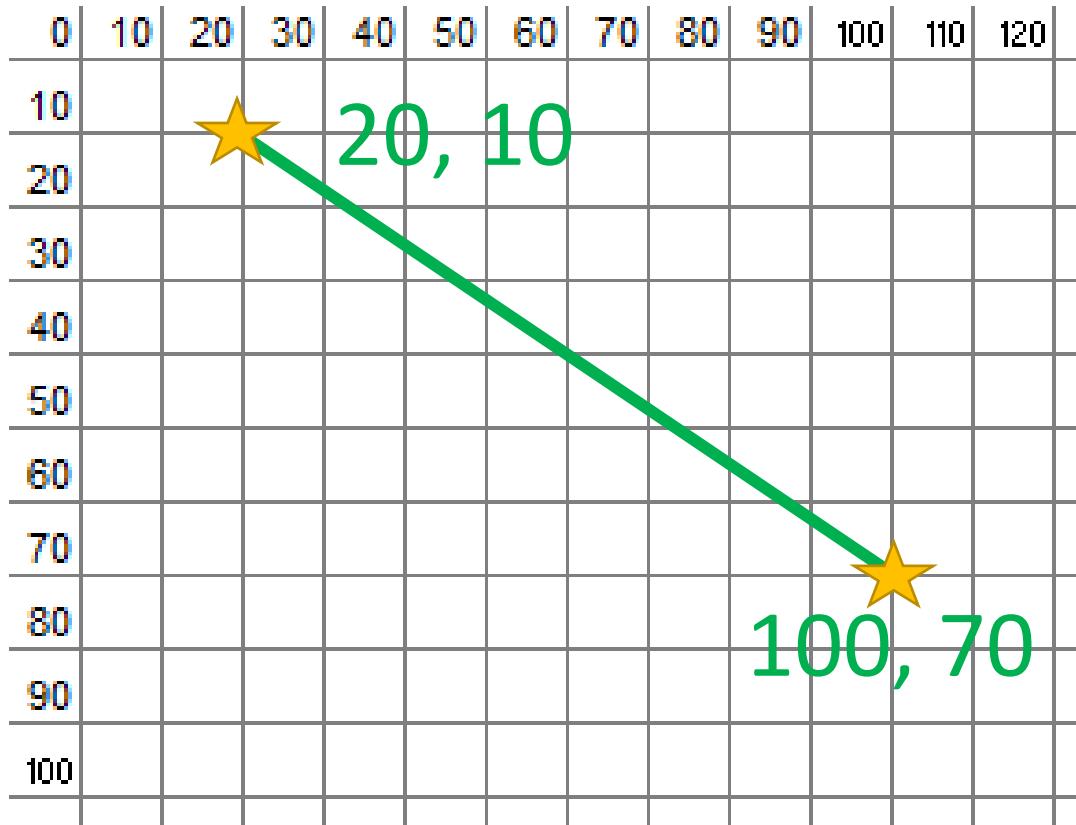
```
import java.applet.*;
import java.awt.*;
public class Rectangle extends Applet
{
    public void paint (Graphics g)
    {
        g.setColor(Color.blue);
        g.drawRect (20, 10, 90, 70);
    }
}
```



```
import java.applet.*;
import java.awt.*;
public class Oval extends Applet
{
    public void paint (Graphics g)
    {
        g.setColor(Color.blue);
        g.fillRect (20, 10, 90, 70);
    }
}
```

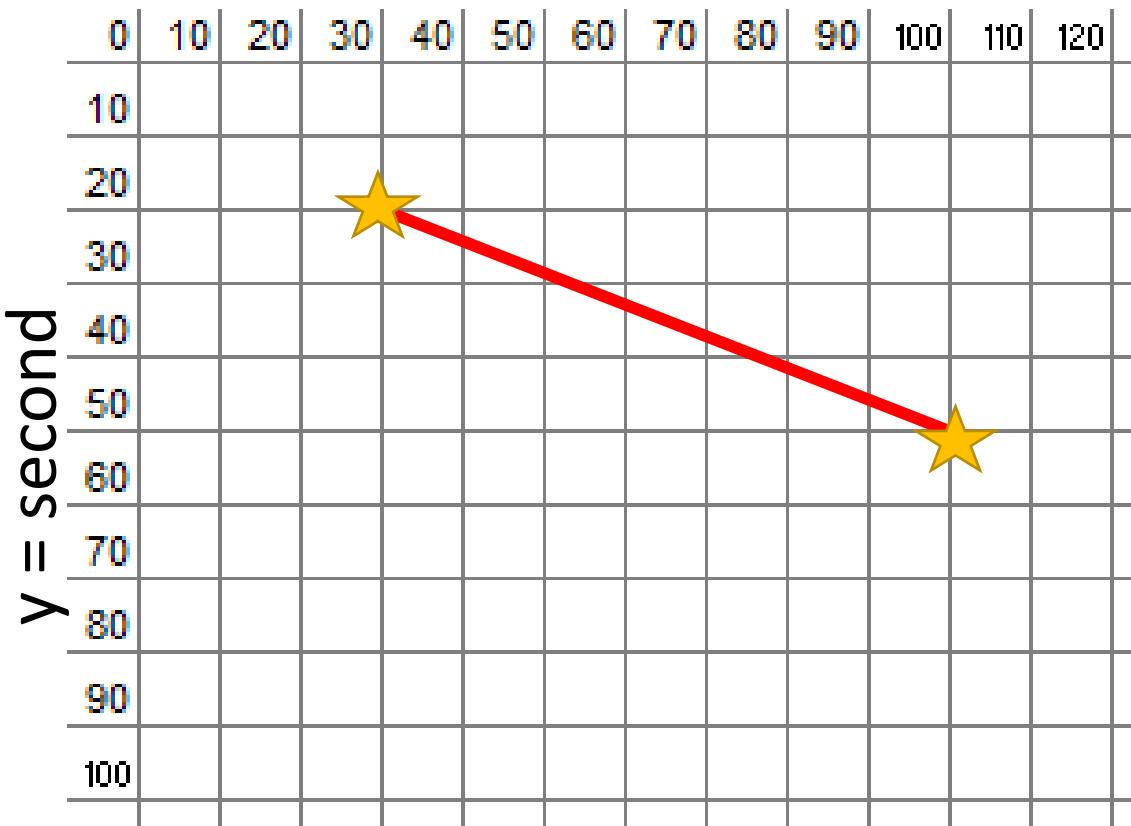


```
import java.applet.*;
import java.awt.*;
public class Oval2 extends Applet
{
    public void paint (Graphics g)
    {
        g.setColor(Color._____);
        g.fillOval (_, __, __, __);
    }
}
```

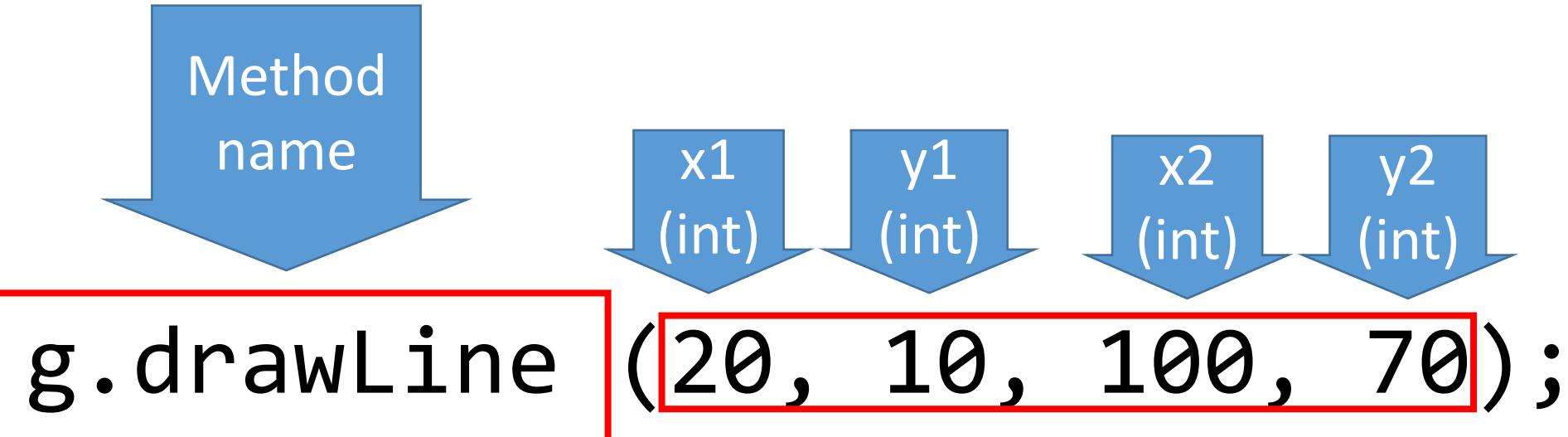


```
import java.applet.*;
import java.awt.*;
public class Line extends Applet
{
    public void paint (Graphics g)
    {
        g.setColor(Color.green);
        g.drawLine (20, 10, 100, 70);
    }
}
```

x = first



```
import java.applet.*;
import java.awt.*;
public class Line extends Applet
{
    public void paint (Graphics g)
    {
        g.setColor(Color._____);
        g.drawLine (_, _, _, _);
    }
}
```



Method name = what
you want drawn

Parameters = values the method needs

Method
name

x1
(int)

y1
(int)

x2
(int)

y2
(int)

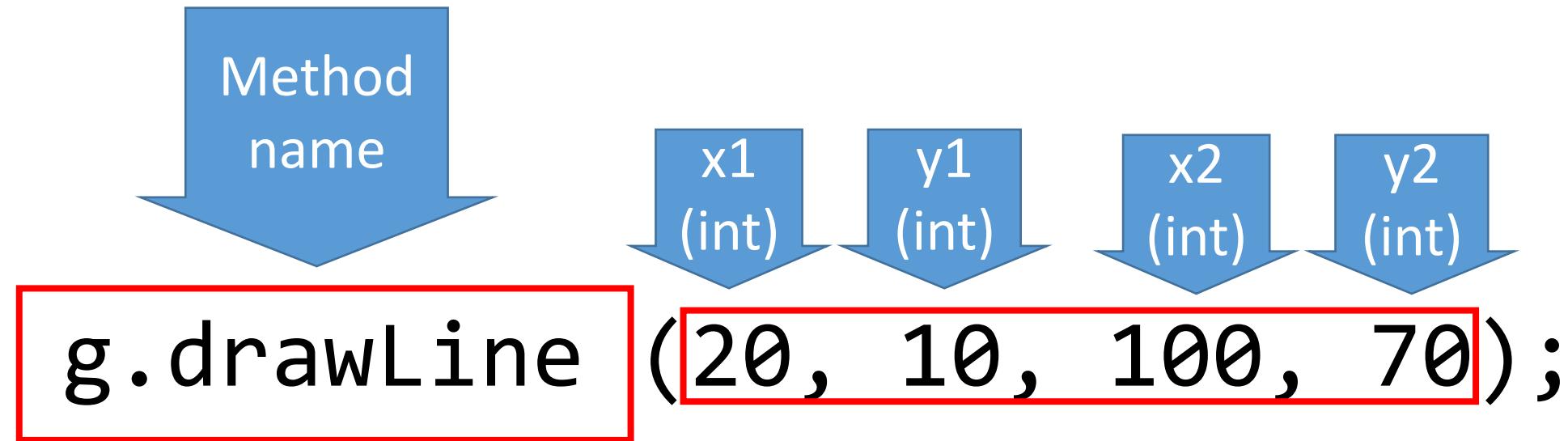
```
g.drawLine(20, 10, 100, 70);
```

Method name = what
you want drawn

Parameters = values the method needs

What is the
method
name?

```
g.drawLine (10, 20, 30, 50);
```

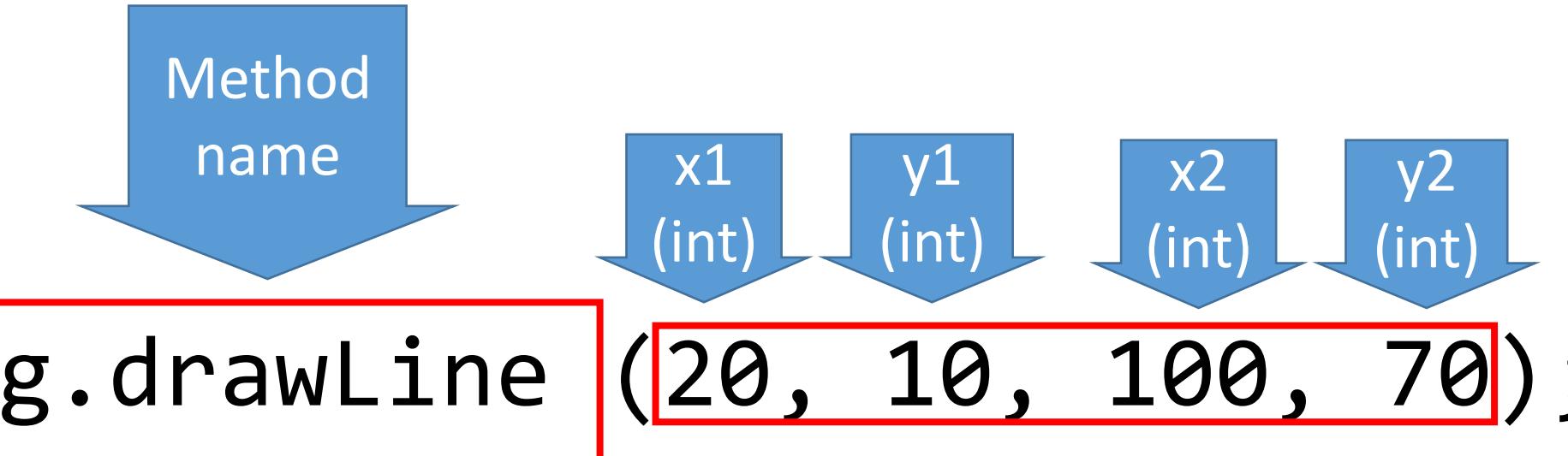


Method name = what
you want drawn

Parameters = values the method needs

What is the
value of x2?

g.drawLine (10, 20, 30, 50);

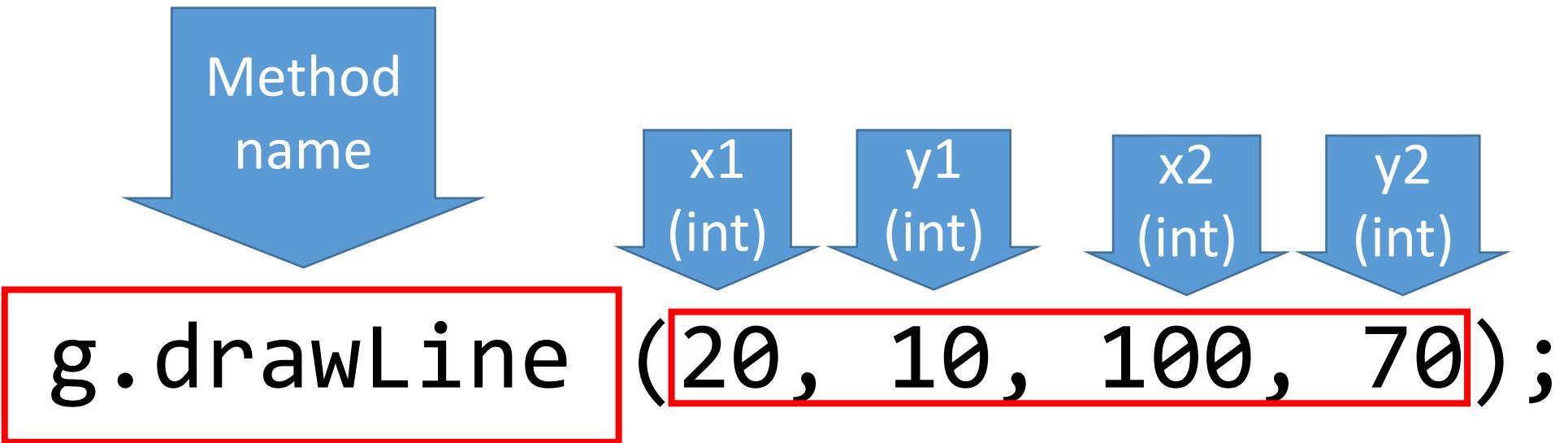


Method name = what
you want drawn

Parameters = values the method needs

What is the
value of y1?

```
g.drawLine (10, 20, 30, 50);
```



Method name = what
you want drawn

Parameters = values the method needs

How many
parameters?

```
g.drawLine (10, 20, 30, 50);
```

Method
name

x1
(int)

y1
(int)

x2
(int)

y2
(int)

```
g.drawLine(20, 10, 100, 70);
```

Method name = what
you want drawn

Parameters = values the method needs

What is the
method
name?

```
g.setColor (Color.yellow);
```

Method name
x1 (int) y1 (int) x2 (int) y2 (int)
g.drawLine(20, 10, 100, 70);

Method name = what you want drawn

Parameters = values the method needs

How many parameters?

g.setColor (Color.yellow);

```
g.drawLine(20, 10, 100, 70);
```

Method name = what
you want drawn

Parameters = values the method needs

What value is
passed in the
parameter?

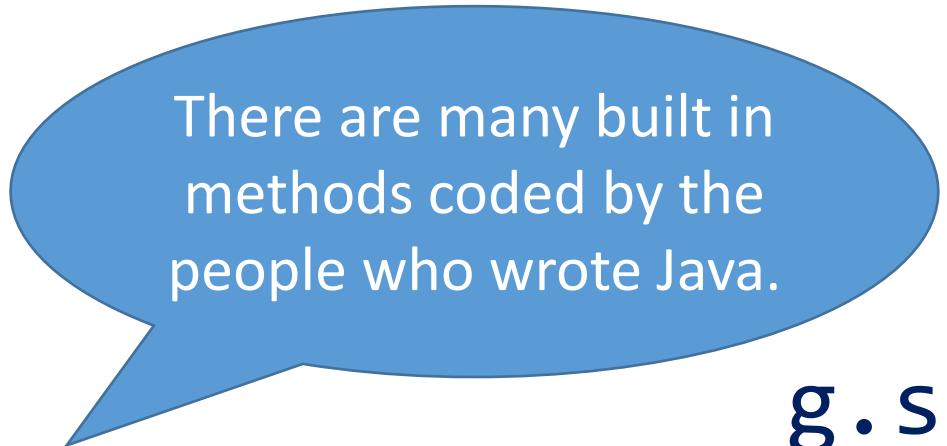
```
g.setColor (Color.yellow);
```

```
import java.applet.*;
import java.awt.*;
```

Class – contains code

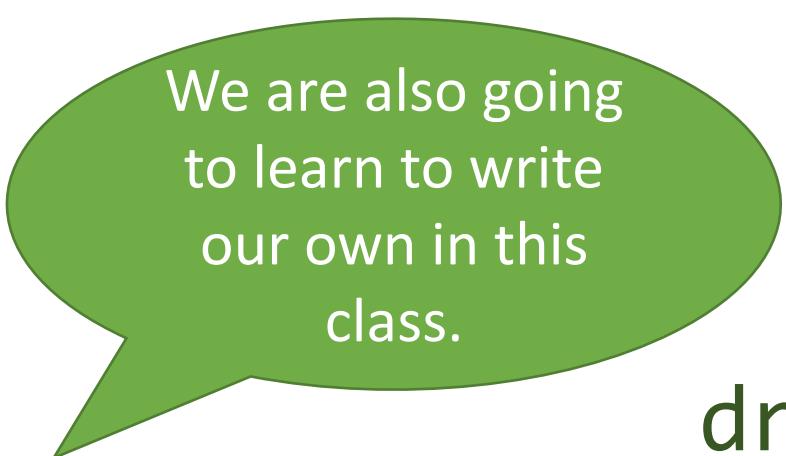
Graphics go in
Applets

```
public class Line extends Applet
{
    Paint Method
    public void paint (Graphics g)
    {
        g.setColor(Color.green);
        g.drawLine (20, 10, 100, 70);
        g.drawLine (100, 70, 80, 40);
    }
}
```



There are many built in methods coded by the people who wrote Java.

```
g.setColor (Color.yellow);  
g.drawLine (20, 10, 100, 70);  
g.fillRect (20, 10, 90, 70);  
g.drawOval (20, 10, 90, 70);
```



We are also going to learn to write our own in this class.

drawFish (29, 50);







© Disney/Pixar

i X

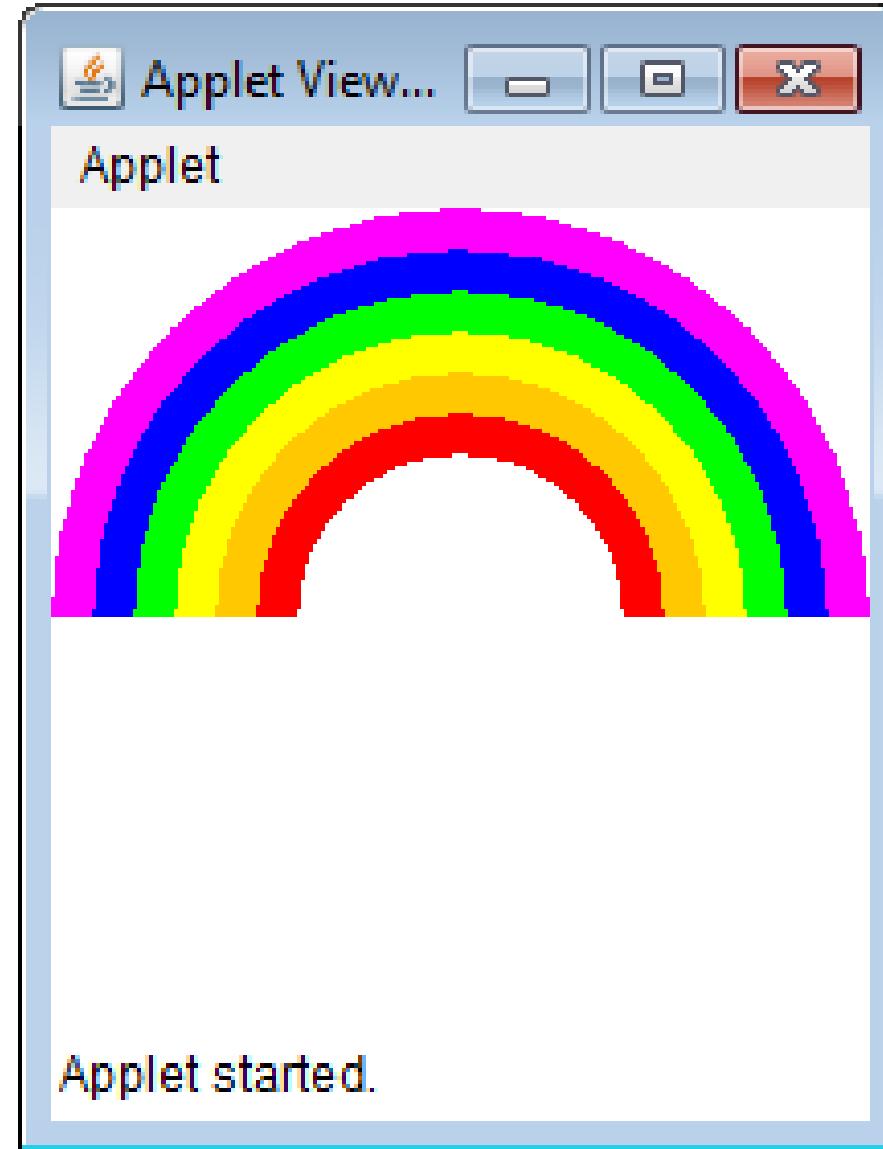


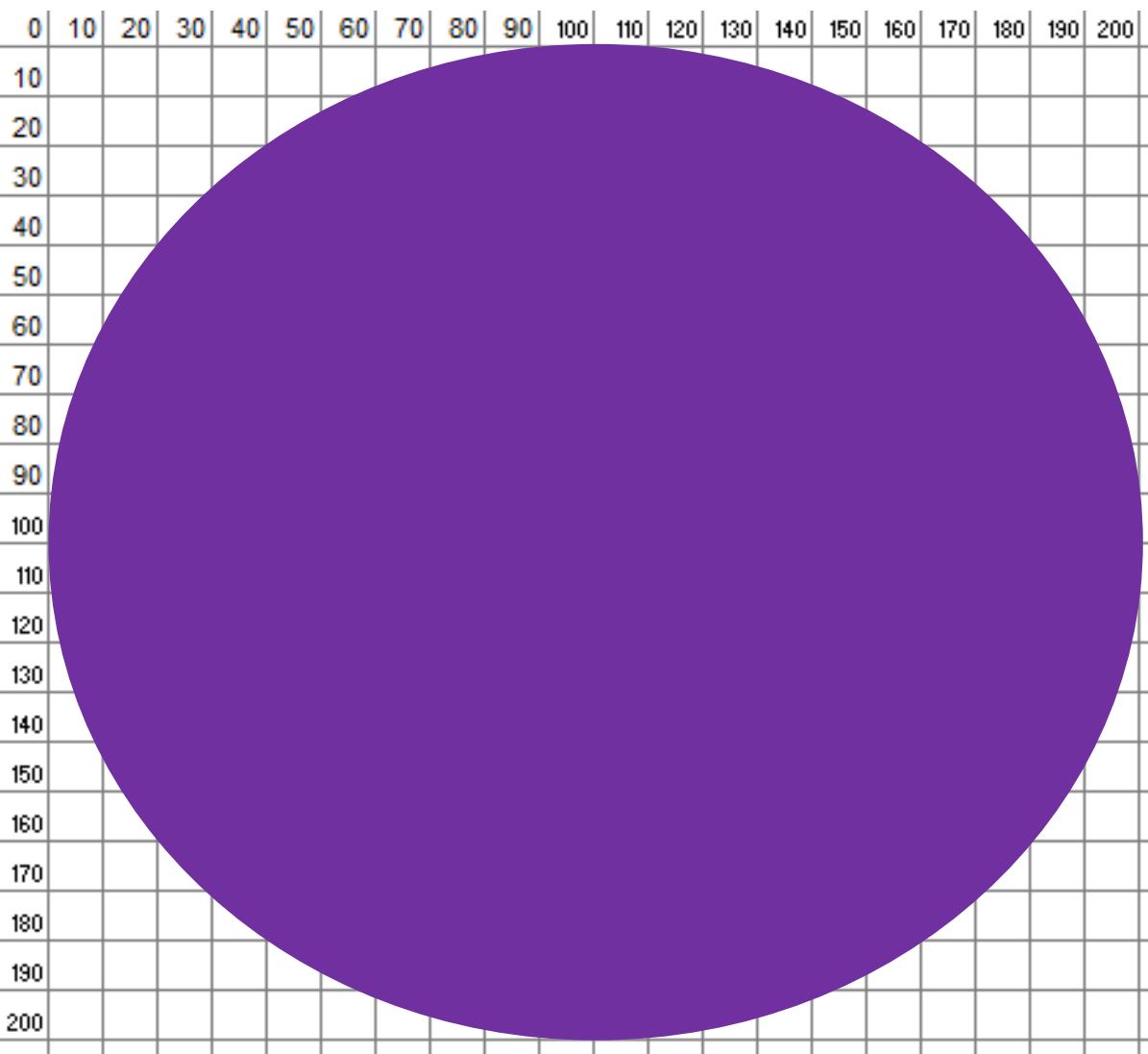






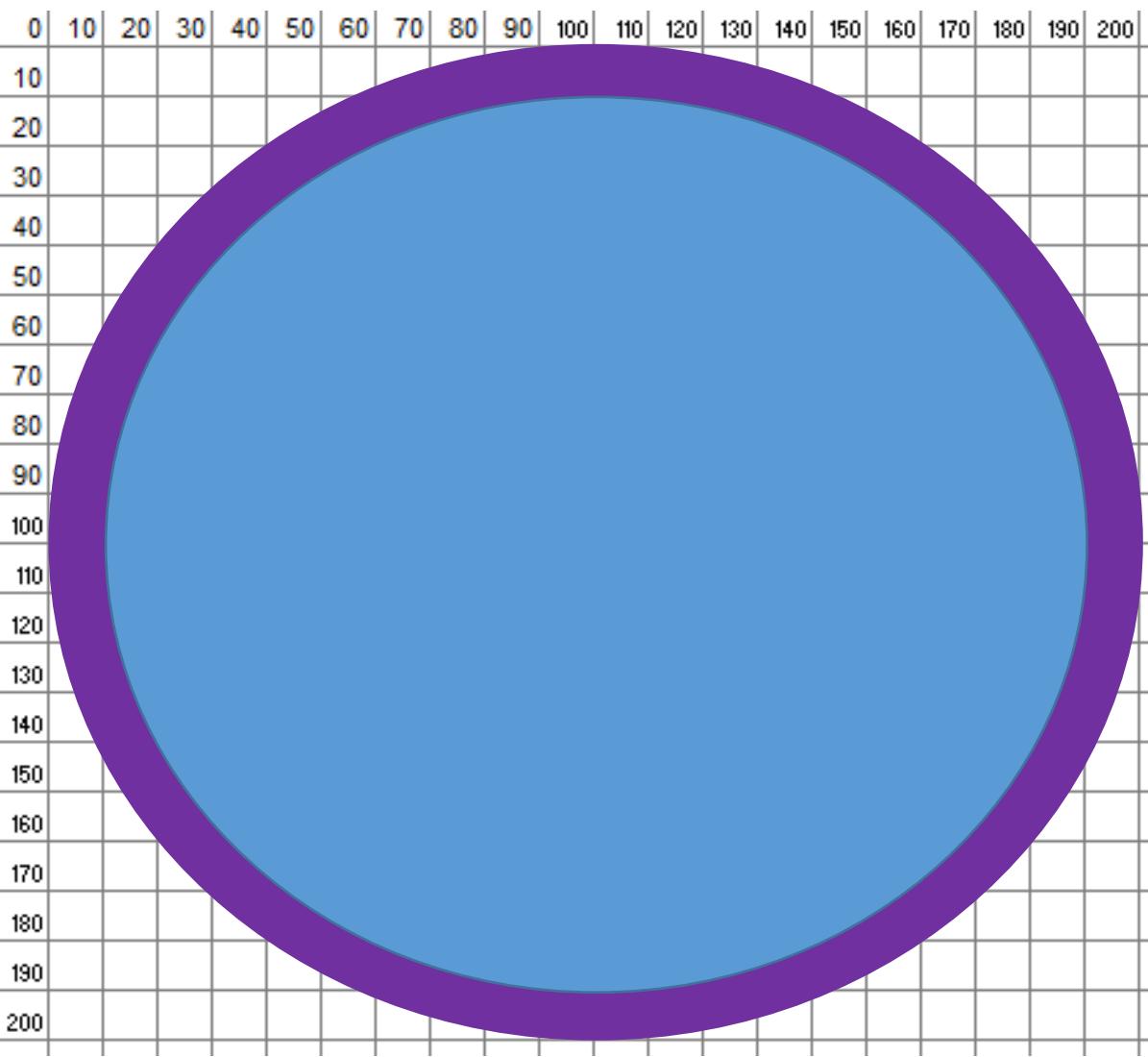
How can we
make a
rainbow?



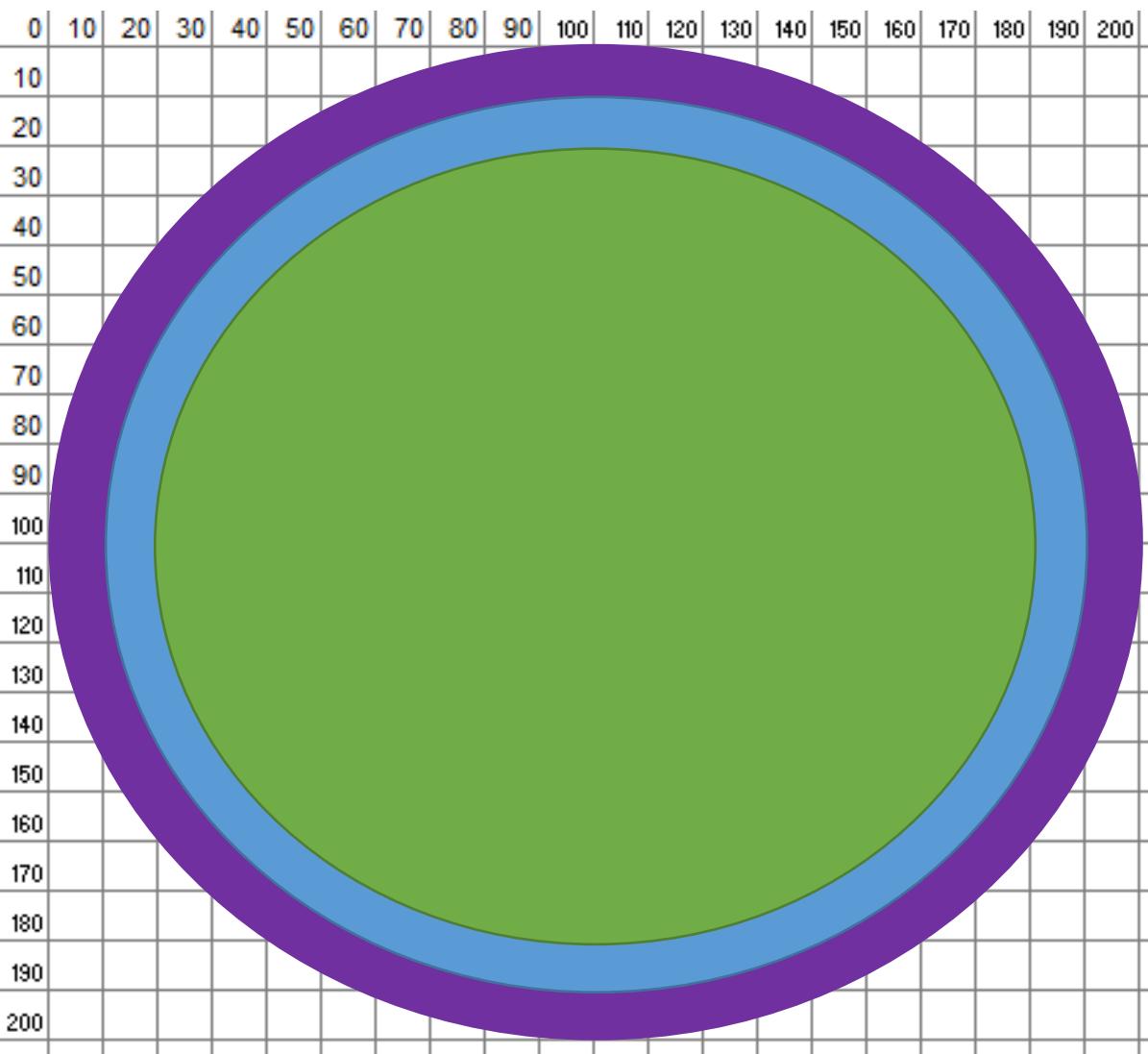


```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillOval (0, 0, 200, 200);

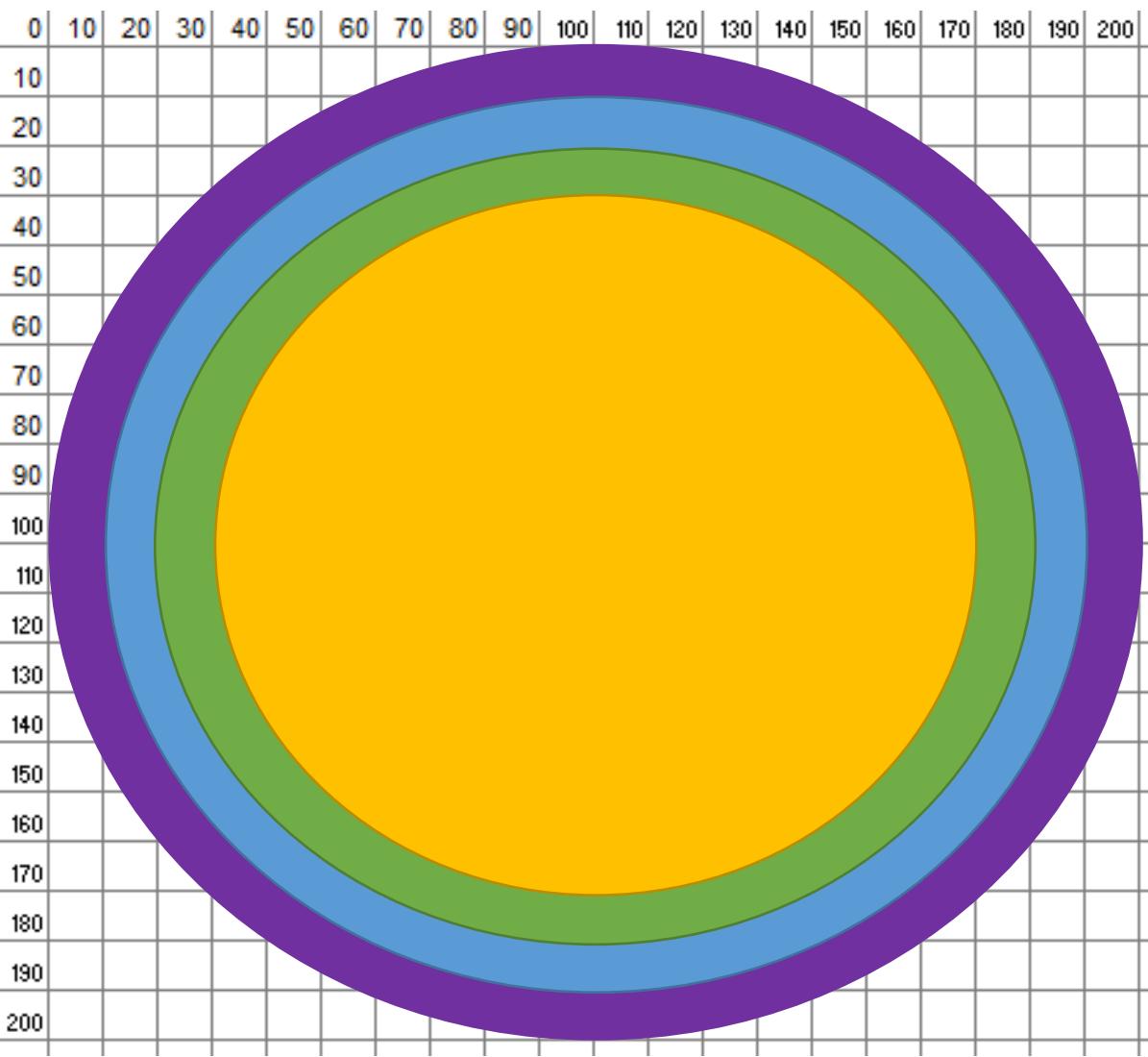
}
}
```



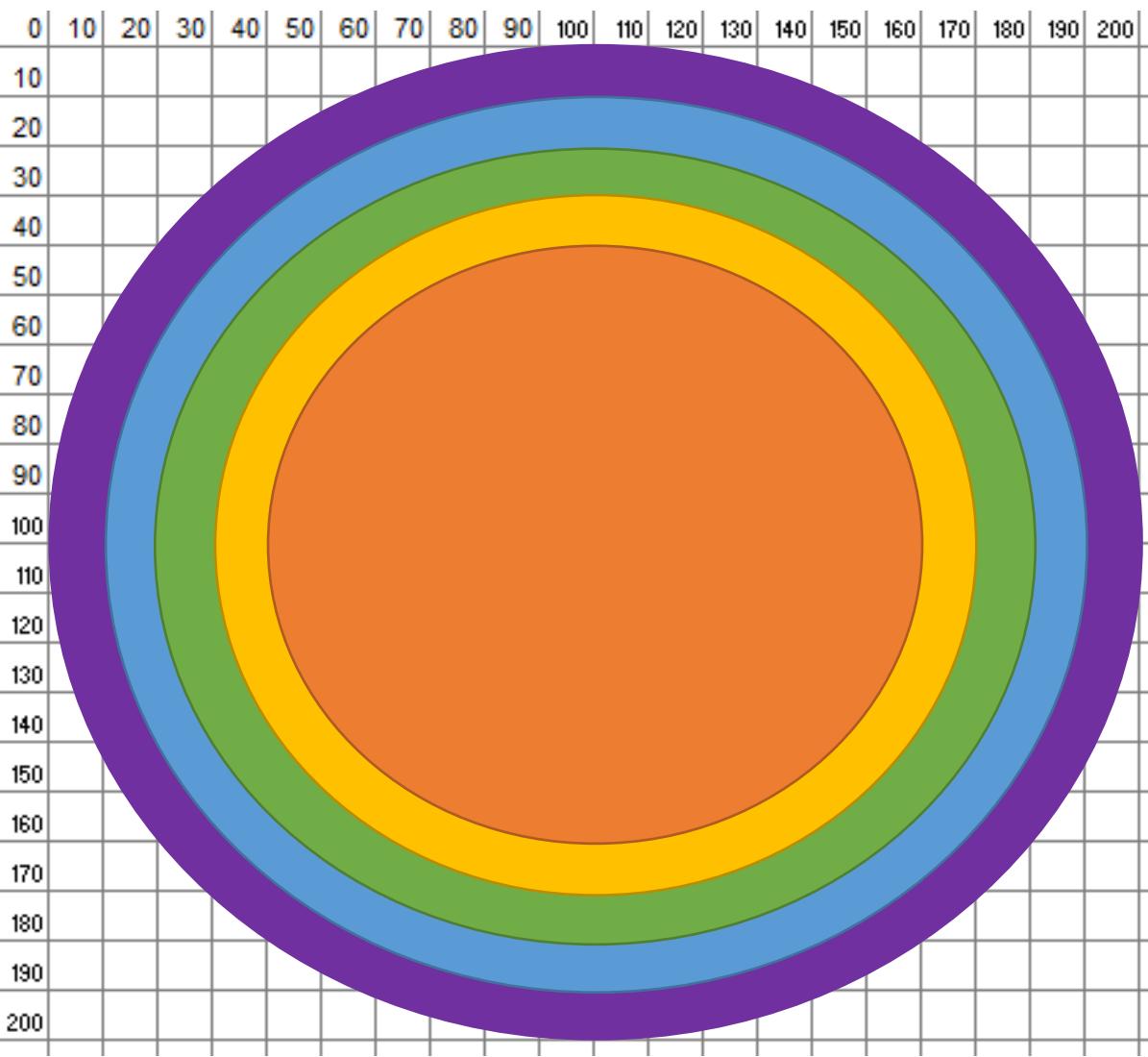
```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillOval (0, 0, 200, 200);
    g.setColor (Color.blue);
    g.fillOval (10, 10, 180, 180);
}
}
```



```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillOval (0, 0, 200, 200);
    g.setColor (Color.blue);
    g.fillOval (10, 10, 180, 180);
    g.setColor (Color.green);
    g.fillOval (20, 20, 160, 160);
}
```

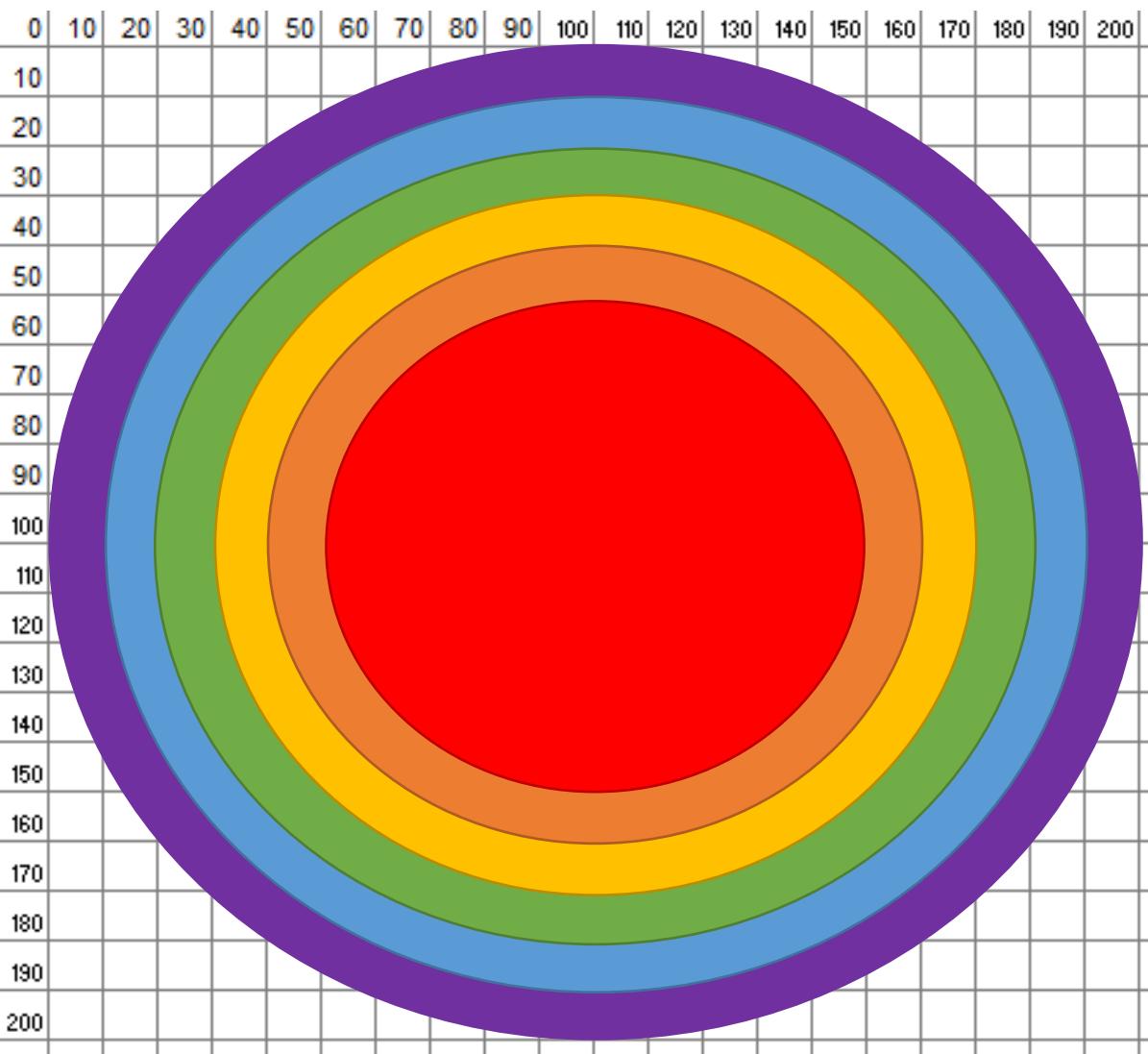


```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillOval (0, 0, 200, 200);
    g.setColor (Color.blue);
    g.fillOval (10, 10, 180, 180);
    g.setColor (Color.green);
    g.fillOval (20, 20, 160, 160);
    g.setColor (Color.yellow);
    g.fillOval (30, 30, 140, 140);
}
}
```

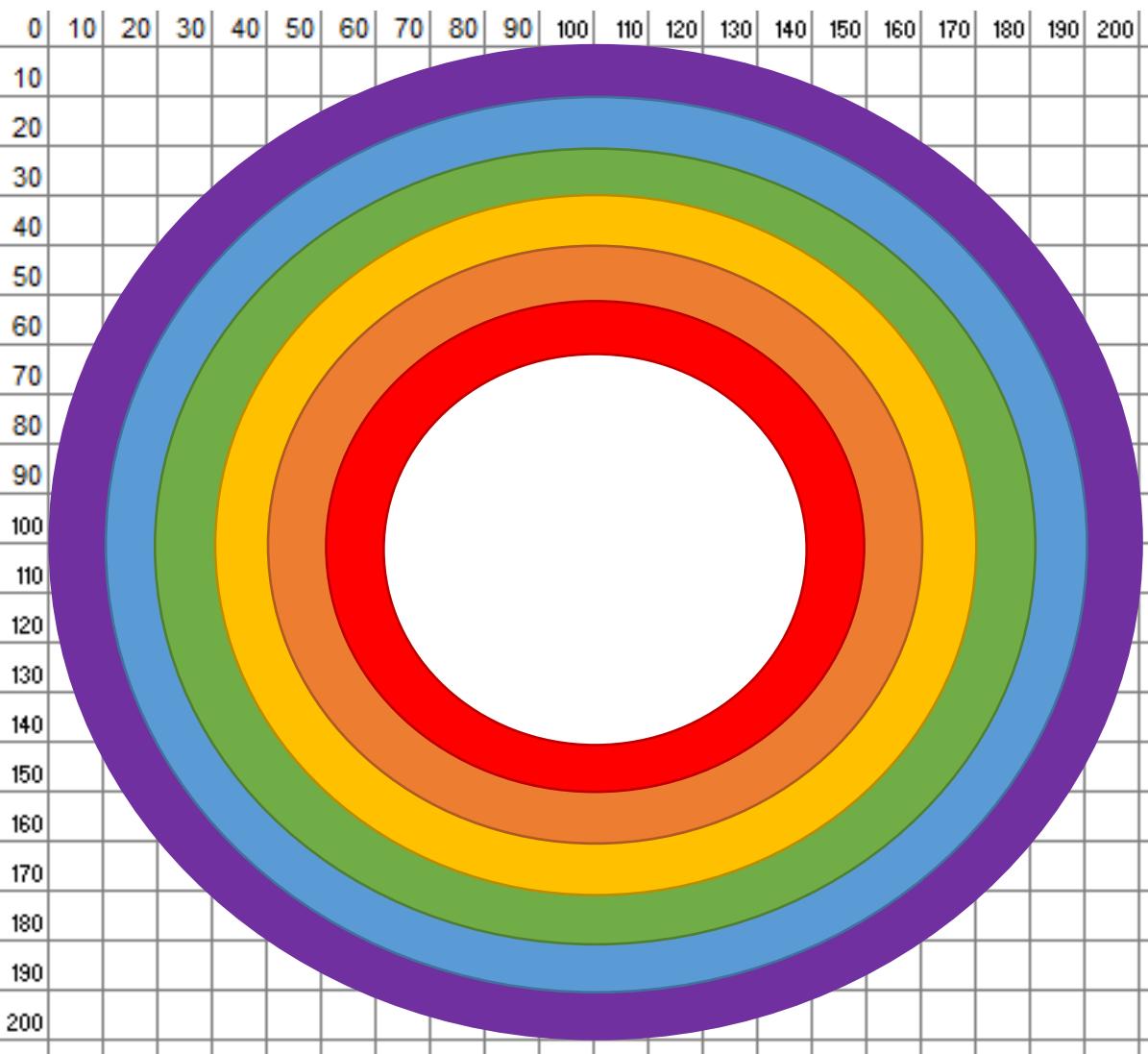


```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillRect (0, 0, 200, 200);
    g.setColor (Color.blue);
    g.fillRect (10, 10, 180, 180);
    g.setColor (Color.green);
    g.fillRect (20, 20, 160, 160);
    g.setColor (Color.yellow);
    g.fillRect (30, 30, 140, 140);
    g.setColor (Color.orange);
    g.fillRect (40, 40, 120, 120);
}

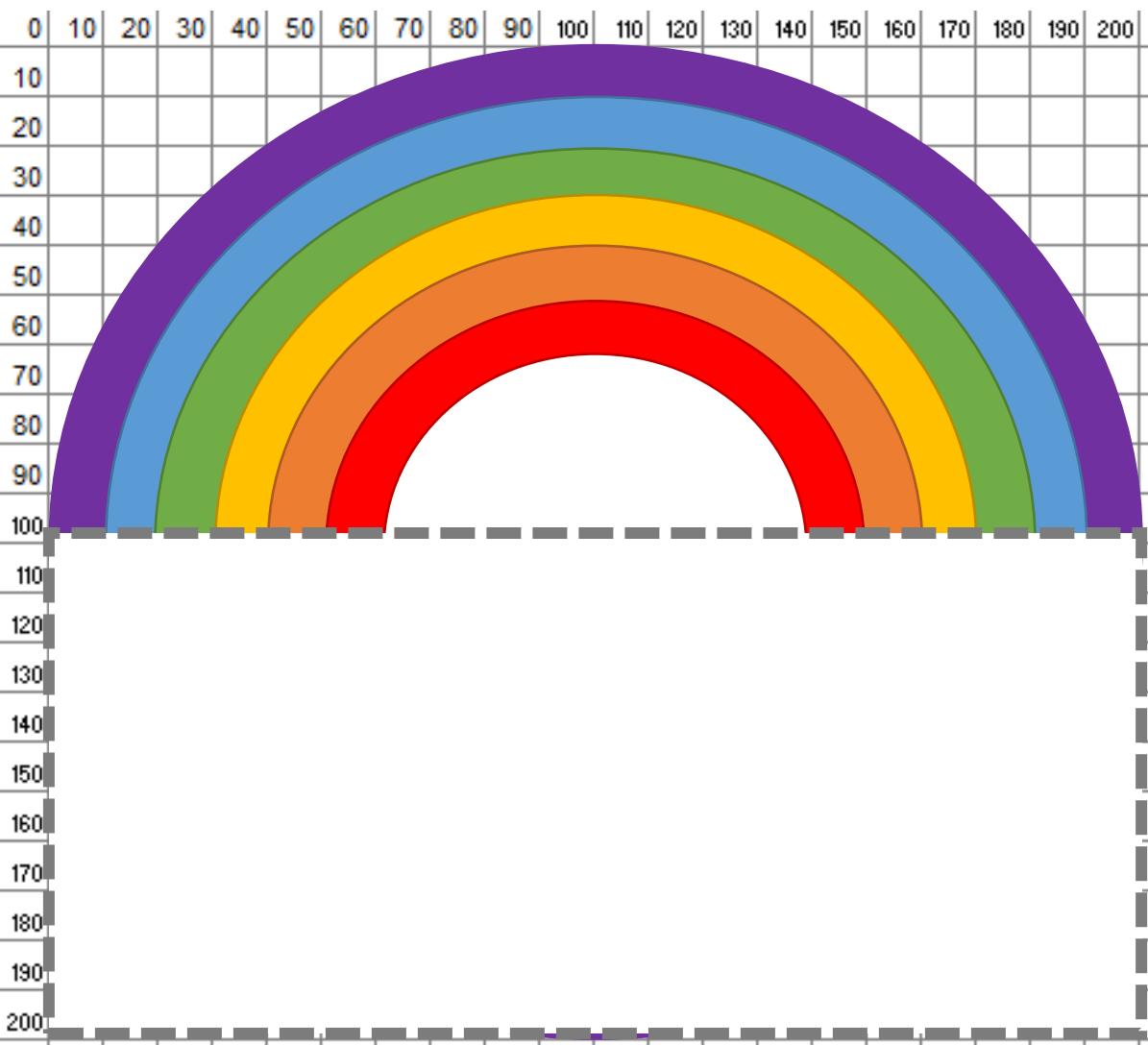
}
```



```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillRect (0, 0, 200, 200);
    g.setColor (Color.blue);
    g.fillRect (10, 10, 180, 180);
    g.setColor (Color.green);
    g.fillRect (20, 20, 160, 160);
    g.setColor (Color.yellow);
    g.fillRect (30, 30, 140, 140);
    g.setColor (Color.orange);
    g.fillRect (40, 40, 120, 120);
    g.setColor (Color.red);
    g.fillRect (50, 50, 100, 100);
}
```



```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillOval (0, 0, 200, 200);
    g.setColor (Color.blue);
    g.fillOval (10, 10, 180, 180);
    g.setColor (Color.green);
    g.fillOval (20, 20, 160, 160);
    g.setColor (Color.yellow);
    g.fillOval (30, 30, 140, 140);
    g.setColor (Color.orange);
    g.fillOval (40, 40, 120, 120);
    g.setColor (Color.red);
    g.fillOval (50, 50, 100, 100);
    g.setColor (Color.white);
    g.fillOval (60, 60, 80, 80);
}
}
```



```
import java.applet.*; import java.awt.*;
public class rainbow extends Applet
{ public void paint (Graphics g)
{
    g.setColor (Color.magenta);
    g.fillOval (0, 0, 200, 200);
    g.setColor (Color.blue);
    g.fillOval (10, 10, 180, 180);
    g.setColor (Color.green);
    g.fillOval (20, 20, 160, 160);
    g.setColor (Color.yellow);
    g.fillOval (30, 30, 140, 140);
    g.setColor (Color.orange);
    g.fillOval (40, 40, 120, 120);
    g.setColor (Color.red);
    g.fillOval (50, 50, 100, 100);
    g.setColor (Color.white);
    g.fillRect (0,100, 200, 100);
}
```