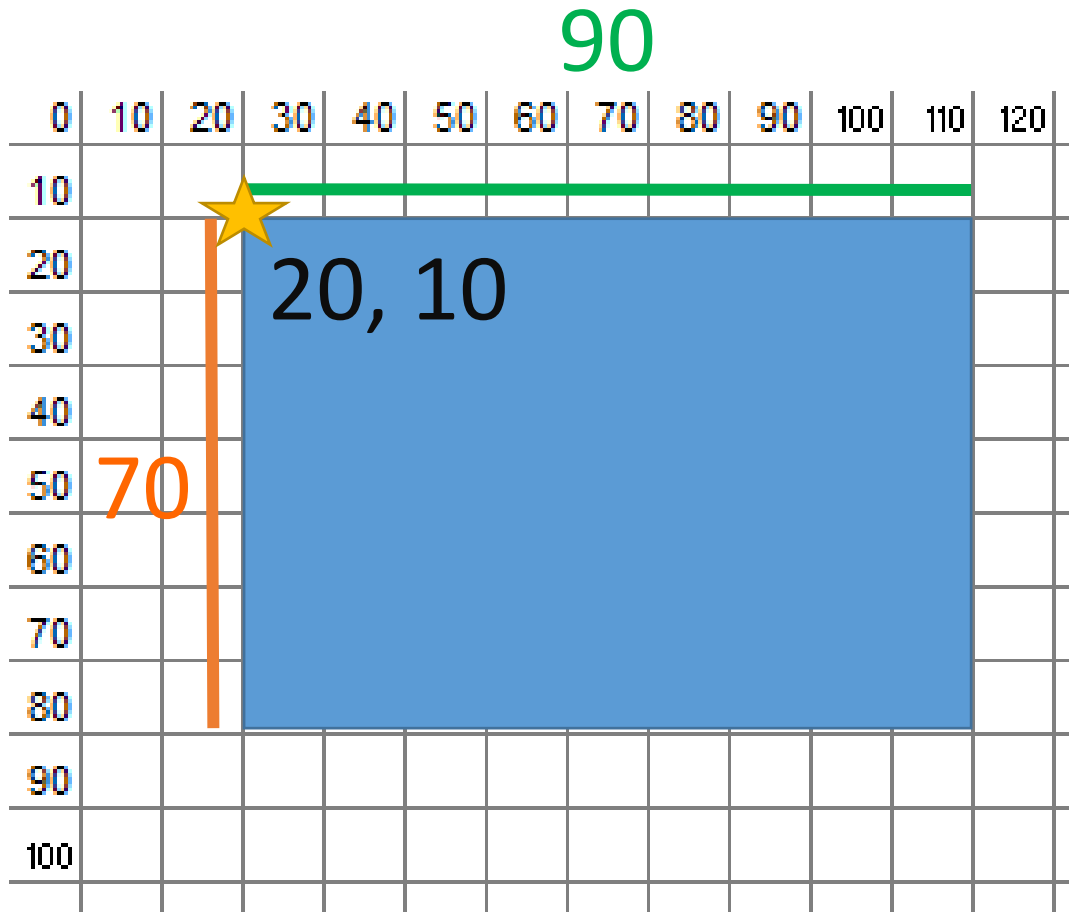
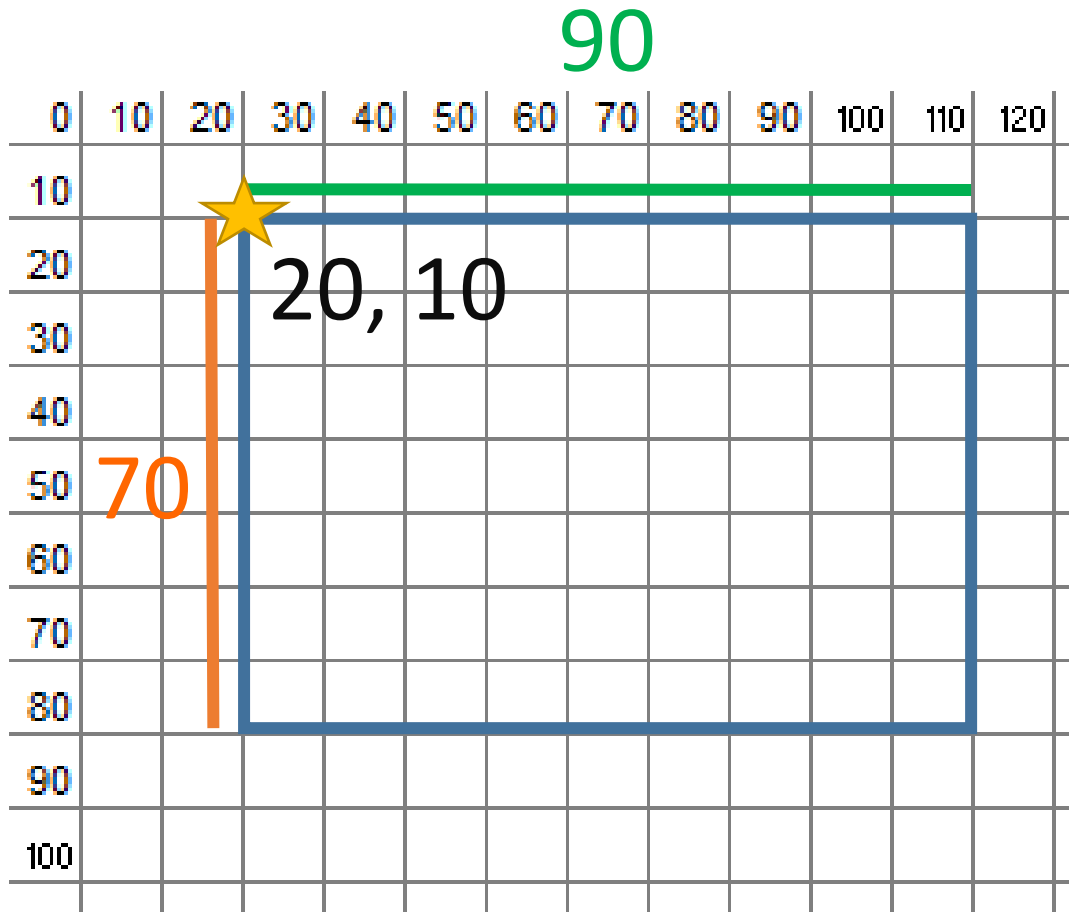


Ovals

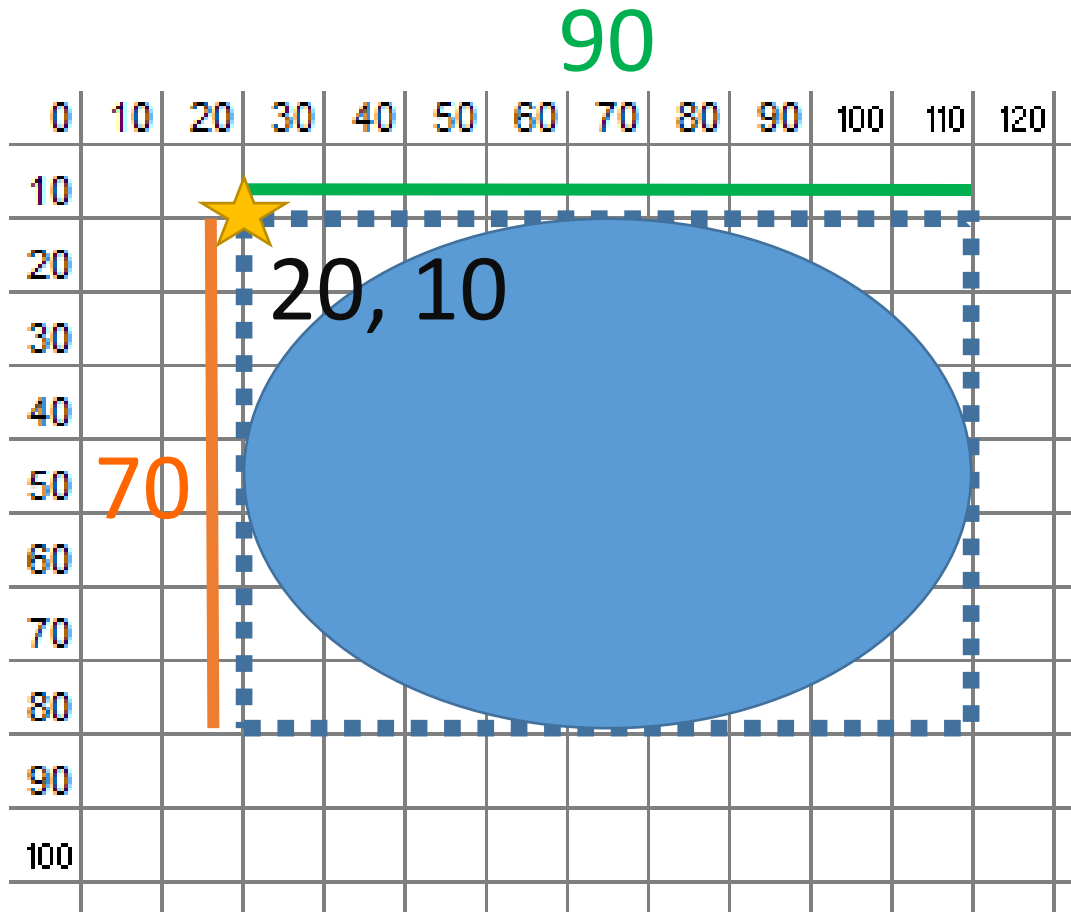
Drawing in Java



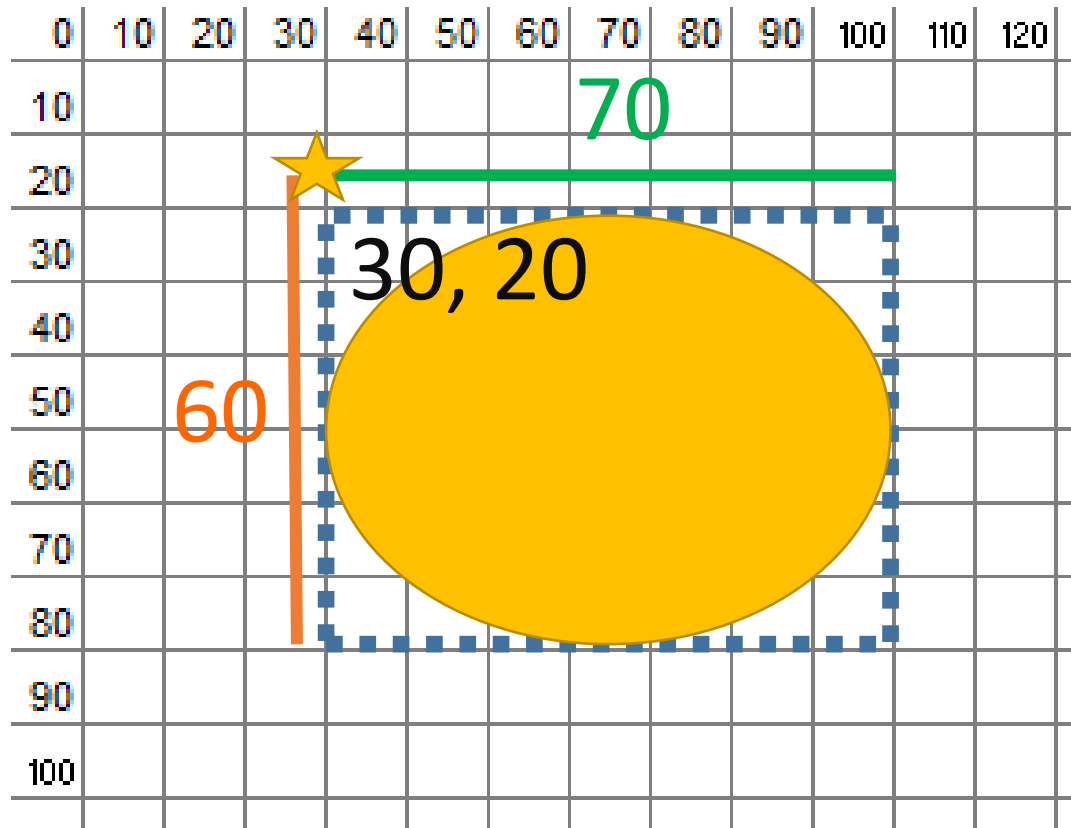
```
import java.applet.*;
import java.awt.*;
public class Rectangle extends Applet
{
    public void paint (Graphics g)
    {
        g.setColor(Color.blue);
        g.fillRect (20, 10, 90, 70);
    }
}
```



```
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.fillOval (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.*;
```

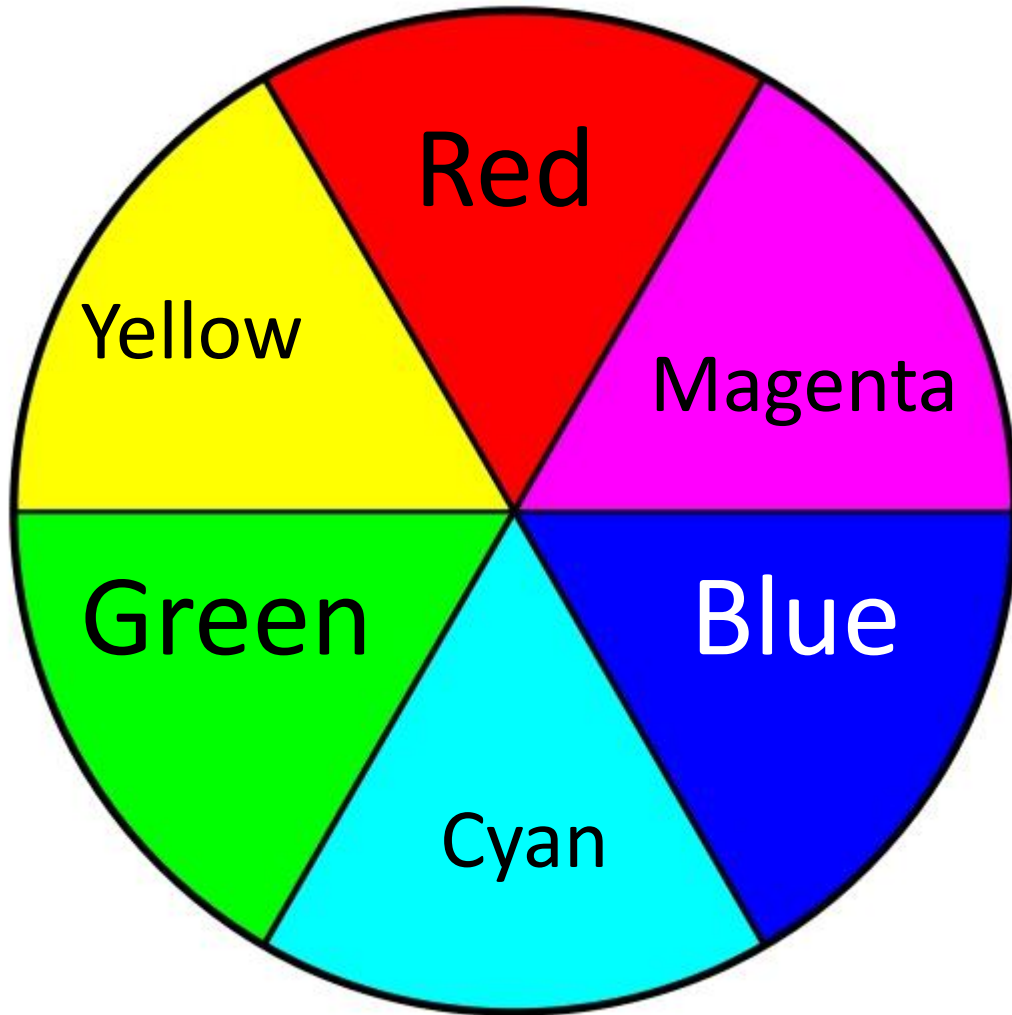
Class – contains code



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);  
    }  
}
```

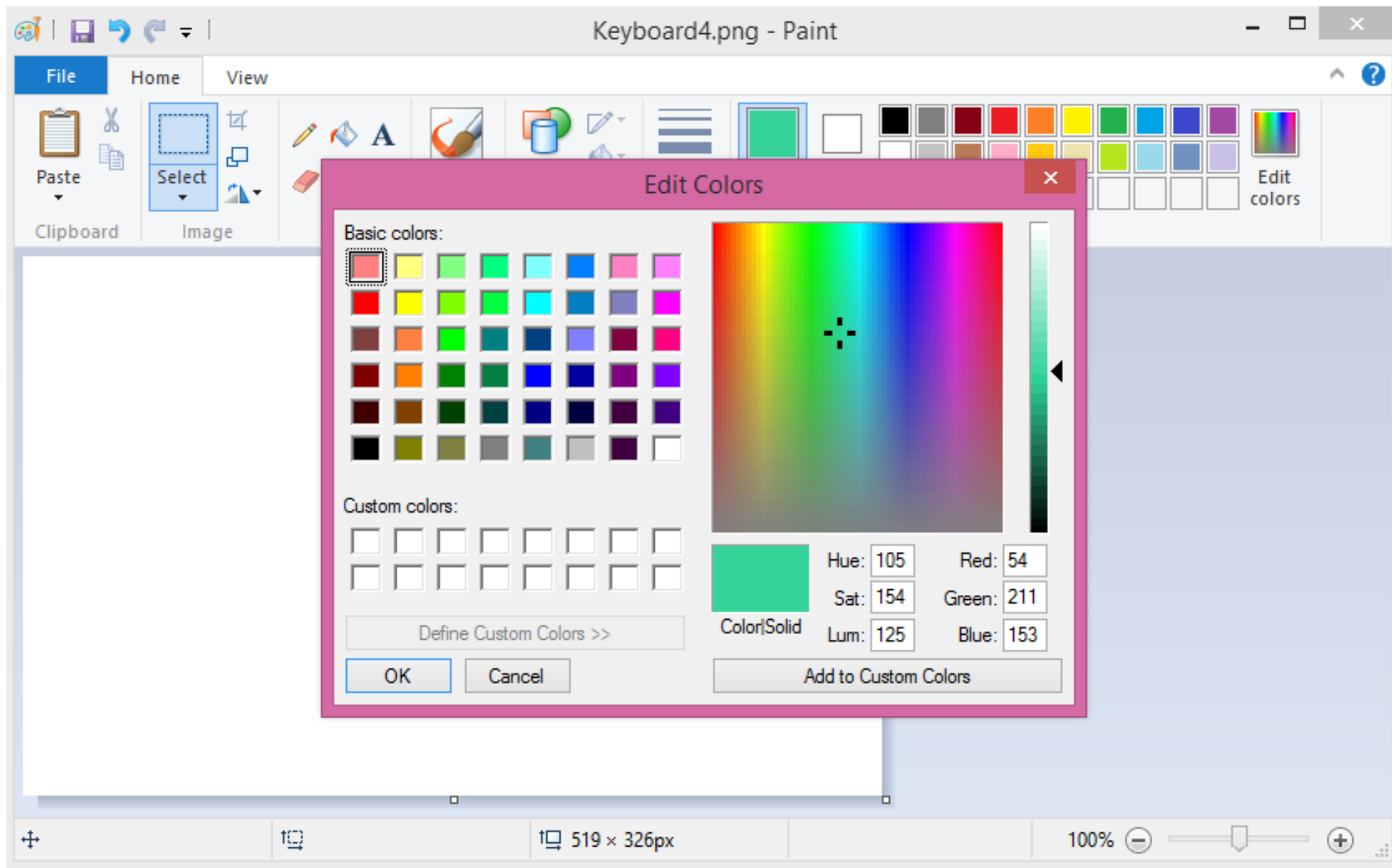
RGB Colours



$$R + G = Y$$

$$G + B = C$$

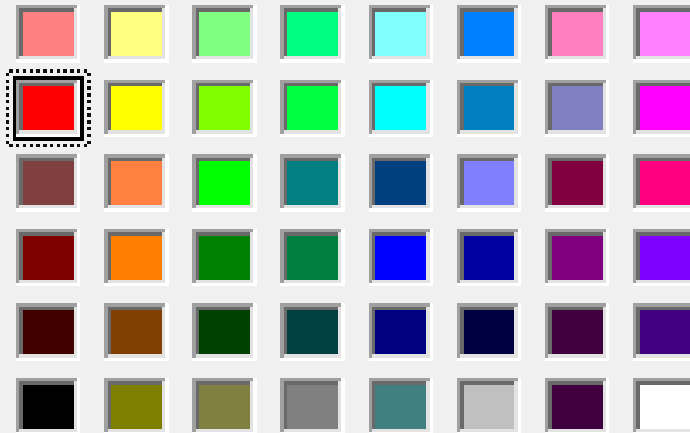
$$R + B = M$$



Edit Colors



Basic colors:



Custom colors:



Define Custom Colors >>

OK

Cancel



Hue: 0

Red: 255

Sat: 240

Green: 0

Lum: 120

Blue: 0

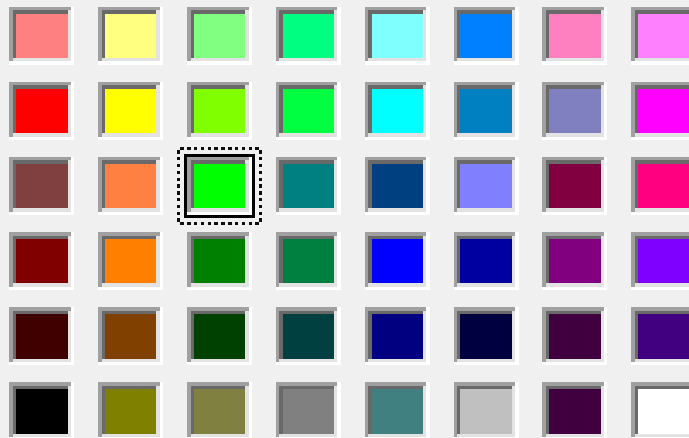
Color|Solid

Add to Custom Colors

Edit Colors



Basic colors:



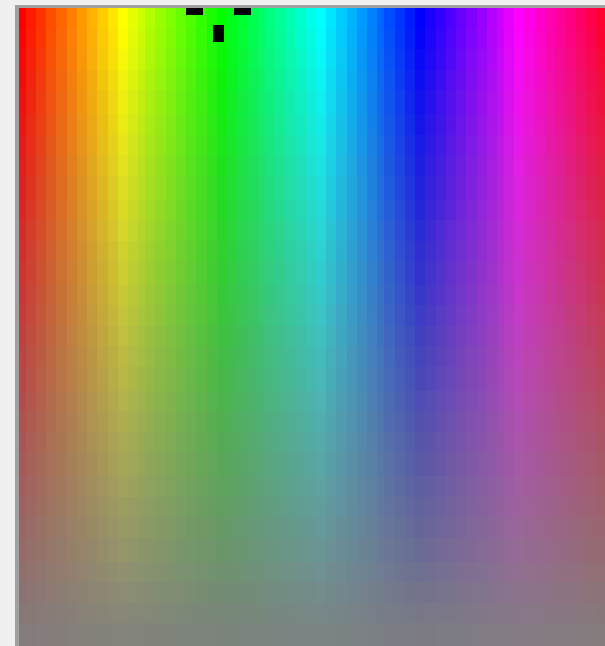
Custom colors:



[Define Custom Colors >>](#)

OK

Cancel



Hue: 80

Red: 0

Sat: 240

Green: 255

Lum: 120

Blue: 0

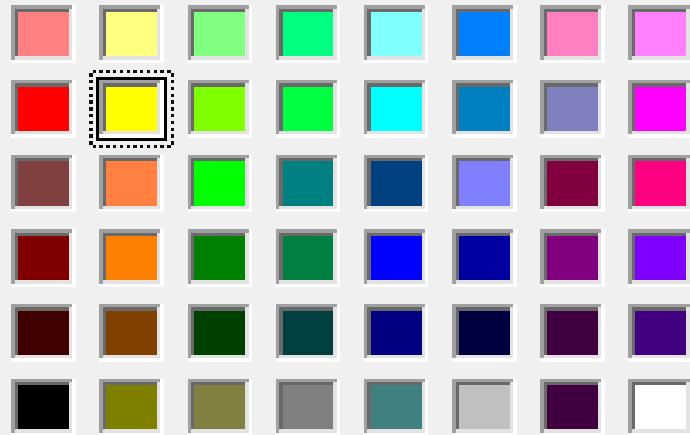
Color|Solid

Add to Custom Colors

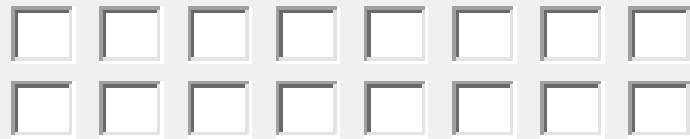
Edit Colors



Basic colors:



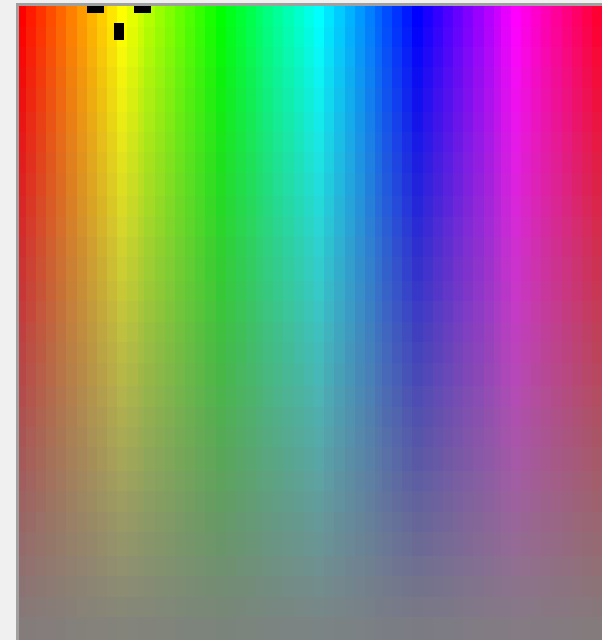
Custom colors:



Define Custom Colors >>

OK

Cancel



Hue: 40

Red: 255

Sat: 240

Green: 255

Lum: 120

Blue: 0

ColorSolid

Add to Custom Colors

How do you make custom colours?

red	<code>title.setBackground(new Color(_____,_____,_____));</code>
yellow	<code>title.setBackground(new Color(_____,_____,_____));</code>
green	<code>title.setBackground(new Color(_____,_____,_____));</code>
cyan	<code>title.setBackground(new Color(_____,_____,_____));</code>
blue	<code>title.setBackground(new Color(_____,_____,_____));</code>
magenta	<code>title.setBackground(new Color(_____,_____,_____));</code>
black	<code>title.setBackground(new Color(_____,_____,_____));</code>
white	<code>title.setBackground(new Color(_____,_____,_____));</code>

How do you make custom colours?

red	<code>title.setBackground(new Color(255, 0, 0));</code>
yellow	<code>title.setBackground(new Color(_____, _____, _____));</code>
green	<code>title.setBackground(new Color(0, 255, 0));</code>
cyan	<code>title.setBackground(new Color(_____, _____, _____));</code>
blue	<code>title.setBackground(new Color(0, 0, 255));</code>
magenta	<code>title.setBackground(new Color(_____, _____, _____));</code>
black	<code>title.setBackground(new Color(_____, _____, _____));</code>
white	<code>title.setBackground(new Color(_____, _____, _____));</code>

How do you make custom colours?

red	<code>title.setBackground(new Color(<u>255</u>, <u>0</u>, <u>0</u>));</code>
yellow	<code>title.setBackground(new Color(<u>255</u>, <u>255</u>, <u>0</u>));</code>
green	<code>title.setBackground(new Color(<u>0</u>, <u>255</u>, <u>0</u>));</code>
cyan	<code>title.setBackground(new Color(_____, _____, _____));</code>
blue	<code>title.setBackground(new Color(<u>0</u>, <u>0</u>, <u>255</u>));</code>
magenta	<code>title.setBackground(new Color(_____, _____, _____));</code>
black	<code>title.setBackground(new Color(_____, _____, _____));</code>
white	<code>title.setBackground(new Color(_____, _____, _____));</code>

How do you make custom colours?

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yellow	<code>title.setBackground(new Color(<u>255</u>, <u>255</u>, <u>0</u>));</code>
green	<code>title.setBackground(new Color(<u>0</u>, <u>255</u>, <u>0</u>));</code>
cyan	<code>title.setBackground(new Color(<u>0</u>, <u>255</u>, <u>255</u>));</code>
blue	<code>title.setBackground(new Color(<u>0</u>, <u>0</u>, <u>255</u>));</code>
magenta	<code>title.setBackground(new Color(_____, _____, _____));</code>
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How do you make custom colours?

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green	<code>title.setBackground(new Color(<u>0</u>, <u>255</u>, <u>0</u>));</code>
cyan	<code>title.setBackground(new Color(<u>0</u>, <u>255</u>, <u>255</u>));</code>
blue	<code>title.setBackground(new Color(<u>0</u>, <u>0</u>, <u>255</u>));</code>
magenta	<code>title.setBackground(new Color(<u>255</u>, <u>0</u>, <u>255</u>));</code>
black	<code>title.setBackground(new Color(_____, _____, _____));</code>
white	<code>title.setBackground(new Color(_____, _____, _____));</code>

How do you make custom colours?

red	<code>title.setBackground(new Color(<u>255</u>, <u>0</u>, <u>0</u>));</code>
yellow	<code>title.setBackground(new Color(<u>255</u>, <u>255</u>, <u>0</u>));</code>
green	<code>title.setBackground(new Color(<u>0</u>, <u>255</u>, <u>0</u>));</code>
cyan	<code>title.setBackground(new Color(<u>0</u>, <u>255</u>, <u>255</u>));</code>
blue	<code>title.setBackground(new Color(<u>0</u>, <u>0</u>, <u>255</u>));</code>
magenta	<code>title.setBackground(new Color(<u>255</u>, <u>0</u>, <u>255</u>));</code>
black	<code>title.setBackground(new Color(<u>0</u>, <u>0</u>, <u>0</u>));</code>
white	<code>title.setBackground(new Color(<u>255</u>, <u>255</u>, <u>255</u>));</code>

Magenta is 1111 1111 0000 0000 1111 1111 in binary
or FF 00 FF in hexadecimal.

This is why 255 is
the max number in
each category. In
binary, each part of
the RGB colour
gets 8 bits.

128	64	32	16	8	4	2	1
1	1	1	1	1	1	1	1
128	64	32	16	8	4	2	1
0	0	0	0	0	0	0	0
128	64	32	16	8	4	2	1
1	1	1	1	1	1	1	1



Red: 0

Green: 0

navy blue

Blue: 160



Red: 128

Green: 128

lilac

Blue: 255

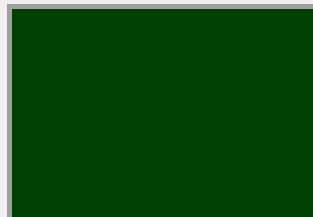


Red: 255

Green: 255

light yellow

Blue: 128



Red: 0

Green: 64

kelly green

Blue: 0



Red: 128

Green: 0

purple

Blue: 255



Red: 255

Green: 128

orange

Blue: 0



Red: 128

Green: 128

gray

Blue: 128



Red: 128

Green: 64

brown

Blue: 0



Red: 255

Green: 128

pink

Blue: 255

How can we
make a
rainbow?

