

# Converting Colors

$Y_{xy}(20.8538, 0.2710, 0.2332)$

Have a look what the booklet for  
Yxy(20.8538, 0.2710, 0.2332)  
contains.

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# Color

**Yxy(20.8160, 0.2706, 0.2330)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	8774B1
RGB	135, 116, 177
RGB Percent	53%, 45%, 69%
CMY	0.4706, 0.5451, 0.3058
CMYK	0.24, 0.34, 0.00, 0.31
HSL	259°, 28%, 57%
HSV	259°, 34%, 69%
XYZ	24.1751, 20.8160, 44.3479
YIQ	128.6350, -8.2570, 22.9990

# Conversions

## Conversions Part 2

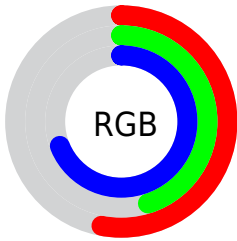
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	135, 116, 177
Decimal	8877233
CIE <sub>Lab</sub>	52.75, 20.47, -29.72
CIE <sub>LCh</sub>	53, 36.089, 304.557
Yxy	20.8160, 0.2706, 0.2330
Android (android.graphics.Color)	4287067313 (0xFF8774B1)
YUV	128.6350, 23.8439, 5.5821
Hunter-Lab	45.6246, 14.7391, -25.6938

# Details

The Yxy color  $20.8160, 0.2706, 0.2330$  is a dark color, and the websafe version is hex  $666699$ . A complement of this color would be  $39.9821, 0.3455, 0.4188$ , and the grayscale version is  $21.7370, 0.3127, 0.3290$ .

A 20% lighter version of the original color is  $44.7073, 0.2800, 0.2519$ , and  $7.4743, 0.2540, 0.2028$  is the 20% darker color. If you saturate the color by 10%, you get  $16.1637, 0.2550, 0.2013$ , and if you desaturate by 10%, it is  $26.3633, 0.2848, 0.2635$ .

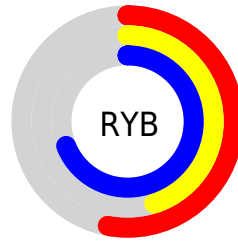
# Distribution



Red (53%)

Green (45%)

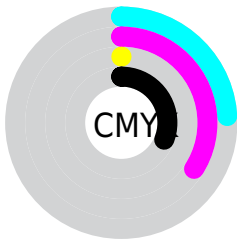
Blue (69%)



Red (53%)

Yellow (45%)

Blue (69%)

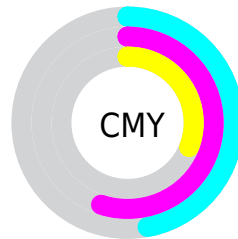


Cyan (24%)

Magenta (34%)

Yellow (0%)

Black (31%)



Cyan (47%)

Magenta (55%)


Yellow (31%)


# Brightness & Saturation Gradients

These gradients show how the Yxy color 20.8160, 0.2706, 0.2330 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.


Similar to the brightness gradients but the following saturation gradients show a change of the Yxy color 20.8160, 0.2706, 0.2330 by changing the saturation by 10% instead.





 20.8160, 0.2706,  
0.2330


 20.8160, 0.2706,  
0.2330


256.2990, 0.2948,  
0.2839

 12.9896, 0.2634,  
0.2195


 44.7811, 0.2802,  
0.2521


 7.4214, 0.2534,  
0.2017


 61.6886, 0.2836,  
0.2592

 3.7270, 0.2389,  
0.1776

 82.3918, 0.2863,  
0.2650

 1.5220, 0.2160,  
0.1437

 107.2753, 0.2886,  
0.2700

 0.3042, 0.1816,  
0.0700

136.7234, 0.2905,  
0.2742

 0.0000, 0.0000,  
0.0000

171.1204, 0.2922,

0.2779

210.8508, 0.2936,  
0.2811

■ 20.8160, 0.2706,  
0.2330

■ 20.8160, 0.2706,  
0.2330

■ 16.1637, 0.2550,  
0.2013

■ 26.3633, 0.2848,  
0.2635

■ 12.3556, 0.2385,  
0.1697

■ 32.8476, 0.2973,  
0.2920

■ 9.3398, 0.2216,  
0.1399

■ 40.3111, 0.3083,  
0.3182

■ 7.0573, 0.2052,  
0.1136

■ 48.7929, 0.3178,  
0.3417

■ 5.4404, 0.1904,  
0.0927

■ 58.3298, 0.3258,  
0.3627

■ 4.4081, 0.1779,  
0.0782

■ 68.9567, 0.3326,  
0.3813

■ 3.9916, 0.1719,  
0.0721

■ 80.7070, 0.3384,  
0.3977

■ 91.9349, 0.3438,  
0.4098

■ 94.0514, 0.3521,  
0.4076

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



20.8160, 0.2229, 0.2278



20.8160, 0.2706, 0.2330



20.8160, 0.3355, 0.2581

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



20.8160, 0.2706, 0.2330



20.8160, 0.4391, 0.3964



20.8160, 0.2290, 0.3553

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



20.8160, 0.2706, 0.2330



39.9821, 0.3455, 0.4188

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



20.8160, 0.2810, 0.4193



20.8160, 0.2706, 0.2330



20.8160, 0.4029, 0.4365

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



20.8160, 0.2706, 0.2330



20.8160, 0.4392, 0.3469



20.8160, 0.3447, 0.4495



20.8160, 0.2007, 0.2900



# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



20.8160, 0.2706, 0.2330



20.8160, 0.3800, 0.2836



20.8160, 0.3447, 0.4495



20.8160, 0.2441, 0.3785

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



20.8168, 0.2706, 0.2330



64.3441, 0.3023, 0.3036



31.5852, 0.2610, 0.2999



13.5552, 0.3007, 0.3000



89.0005, 0.3127, 0.3290



17.0645, 0.3127, 0.3290



# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



20.8168, 0.2706, 0.2330



31.0959, 0.2595, 0.2102



23.6446, 0.3029, 0.2415



8.3543, 0.3032, 0.3058



2.9203, 0.1729, 0.0726



0.1236, 0.2059, 0.0908



# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



24.3082, 0.3384, 0.2692



38.3603, 0.3456, 0.2567



37.3172, 0.3182, 0.4270



8.6007, 0.3183, 0.3134



7.7990, 0.4173, 0.2072



0.2553, 0.3845, 0.1892



# Previews

## White Background



This preview shows how the Yxy color 20.8160, 0.2706, 0.2330 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✗ Fail

Large Text (above 18pt) WCAG AAA ✗ Fail

Any Text WCAG AAA ✗ Fail



# Black Background



This preview shows how the Yxy color 20.8160, 0.2706, 0.2330 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

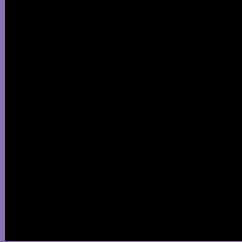
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

**Yxy 20.8160, 0.2706, 0.2330**

## Background



This preview shows how black text looks on a background with the Yxy color 20.8160, 0.2706, 0.2330.



This preview shows how white text looks on a background with the Yxy color 20.8160, 0.2706, 0.2330.

# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



### Original Color

20.8160, 0.2706, 0.2330

### Protanopia

20.8984, 0.2403, 0.2315

### Deuteranopia

20.7617, 0.2487, 0.2429



## Tritanopia

20.9005, 0.3052, 0.3129

# Trichromacy



## Original Color

20.8160, 0.2706, 0.2330

## Protanomaly

20.7928, 0.2506, 0.2314

## Deuteranomaly

20.6609, 0.2554, 0.2383

## Tritanomaly

20.8669, 0.2918, 0.2809

# Monochromacy



## Original Color

20.8160, 0.2706, 0.2330

## Achromatopsia

21.9526, 0.3127, 0.3290

## Achromatomaly

21.3159, 0.2971, 0.2911

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 20.8160, 0.2706, 0.2330 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(135, 116, 177)` looks like.

```
.text, #text, p{  
  color:rgb(135, 116, 177)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(135, 116, 177) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(135, 116, 177) }
```

## Border

The CSS property to change the border of an element to Yxy 20.8160, 0.2706, 0.2330 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(135, 116, 177) }
```

If only the border color should be changed use the property `border-color`.

```
.border{ border-color:rgb(135, 116, 177) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel `rgb(135, 116, 177)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(135, 116, 177); -webkit-box-  
shadow:4px 4px 4px 4px rgb(135, 116, 177);  
box-shadow:4px 4px 4px 4px rgb(135, 116,  
177) }
```



# Background

The CSS property to change the background color of an element to Yxy 20.8160, 0.2706, 0.2330 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(135, 116, 177) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(135,  
116, 177) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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