

# Converting Colors

XYZ(20.7988, 12.8461, 84.8099)

Have a look what the booklet for  
XYZ(20.7988, 12.8461, 84.8099)  
contains.

<b>XYZ(20.7778, 12.8169, 84.5979)</b> .....	3
<b><i>Conversions</i></b> .....	4
<b><i>Details</i></b> .....	6
<b><i>Harmonies</i></b> .....	12
<b><i>Previews</i></b> .....	24
<b><i>Color Blindness Simulation</i></b> .....	28
<b><i>CSS Examples</i></b> .....	31

# Color

**XYZ(20.7778, 12.8169,  
84.5979)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	424DF1
RGB	66, 77, 241
RGB Percent	26%, 30%, 95%
CMY	0.7411, 0.6980, 0.0549
CMYK	0.73, 0.68, 0.00, 0.05
HSL	236°, 86%, 60%
HSV	236°, 73%, 95%
XYZ	20.7778, 12.8169, 84.5979
YIQ	92.4070, -59.2000, 48.6720

# Conversions

## Conversions Part 2

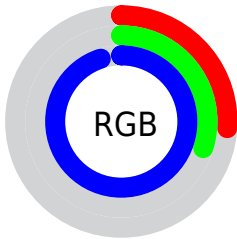
<b>Format</b>	<b>Color</b>
R <sub>Y</sub> B	66, 76, 241
Decimal	4345329
CIE Lab	42.49, 49.11, -83.03
CIE LCh	42, 96.461, 300.603
Yxy	12.8169, 0.1758, 0.1084
Android (android.graphics.Color)	4282535409 (0xFF424DF1)
YUV	92.4070, 73.2563, -23.1589
Hunter-Lab	35.8007, 40.9456, -115.0432

# Details

The XYZ color **20.7778, 12.8169, 84.5979** is a dark color, and the websafe version is hex **3333CC**. The color can be described as dark washed blue. A complement of this color would be **65.5599, 75.6952, 16.3113**, and the grayscale version is **10.1134, 10.6401, 11.5871**.

A 20% lighter version of the original color is **35.9559, 27.7171, 98.0626**, and **9.0638, 4.4519, 45.1813** is the 20% darker color. If you saturate the color by 10%, you get **18.1669, 9.5181, 84.0992**, and if you desaturate by 10%, it is **24.6221, 17.5652, 85.3122**.

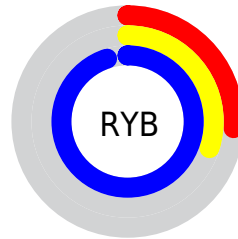
# Distribution



Red (26%)

Green (30%)

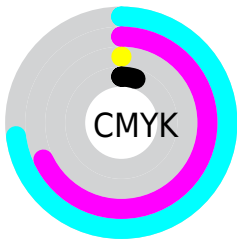
Blue (95%)



Red (26%)

Yellow (30%)

Blue (95%)

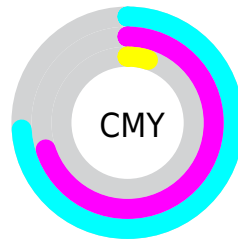


Cyan (73%)

Magenta (68%)

Yellow (0%)

Black (5%)



Cyan (74%)

Magenta (70%)

Yellow (5%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 20.7778, 12.8169, 84.5979 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 XYZ color 20.7778, 12.8169, 84.5979 by changing the saturation by 10% instead.



■ 20.7778, 12.8169,  
84.5979

■ 20.7778, 12.8169,  
84.5979

248.8494,  
209.7409, 530.4064

■ 13.0732, 7.3026,  
62.9610

■ 44.2115, 30.9744,  
141.6804

■ 7.5563, 3.6520,  
45.3688

■ 60.6713, 44.3865,  
177.9631

■ 3.8618, 1.4809,  
31.4030

■ 80.7803, 61.1998,  
219.9647

■ 1.6242, 0.2752,  
20.6449

■ 104.9037, 81.7990,  
268.1038

■ 0.4081, 0.0000,  
12.6759

■ 133.4070,  
106.5682, 322.7990

■ 0.0000, 0.0000,  
7.0777

166.6555,

■ 0.0000, 0.0000,

135.8920, 384.4689

3.4316

205.0145,  
170.1548, 453.5318

■ 0.0000, 0.0000,  
1.3190

■ 0.0000, 0.0000,  
0.0773

■ 20.7778, 12.8169,  
84.5979

■ 20.7778, 12.8169,  
84.5979

■ 18.1669, 9.5181,  
84.0992

■ 24.6221, 17.5652,  
85.3122

■ 16.6350, 7.5013,  
83.7906

■ 29.8250, 23.9040,  
86.2615

■ 16.0500, 6.6963,  
83.6661

■ 36.4988, 31.9581,  
87.4643

■ 44.7435, 41.8399,  
88.9372

■ 54.6504, 53.6521,  
90.6950

■ 66.3037, 67.4898,  
92.7517

■ 79.7820, 83.4418,  
95.1204

■ 92.8773, 99.1309,  
97.4585

# Harmonies

## Analogous

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



12.3297, 12.8169, 104.5226



20.7778, 12.8169, 84.5979



28.8783, 12.8169, 44.2898

# Triad

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



20.7778, 12.8169, 84.5979



20.4163, 12.8169, 0.0000



2.8667, 12.8169, 14.3809

# Complementary

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



20.7778, 12.8169, 84.5979



65.5599, 75.6952, 16.3113

# 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.



3.6089, 12.8169, 2.0828



20.7778, 12.8169, 84.5979



12.0356, 12.8169, 0.0000

# Square

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



20.7778, 12.8169, 84.5979



28.6176, 12.8169, 1.8843



6.3598, 12.8169, 0.0000



3.6747, 12.8169, 45.8840



# Rectangle

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



20.7778, 12.8169, 84.5979



31.8419, 12.8169, 21.5693



6.3598, 12.8169, 0.0000



2.9386, 12.8169, 8.3844

# Sweetspot

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



20.7786, 12.8172, 84.5983



62.7965, 61.7880, 103.2243



47.8926, 69.7454, 85.3119



12.7379, 12.3883, 21.9698



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091



# Same Dimension

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



20.7786, 12.8172, 84.5983



19.7017, 9.5852, 95.4195



28.9540, 15.9853, 84.7789



14.9769, 15.3880, 19.9024



8.7357, 3.6956, 45.3808



0.7545, 0.3630, 3.7845



# Inverse Universe

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



39.5642, 23.1344, 9.4011



42.3027, 22.5619, 4.8231



47.9920, 71.3222, 16.3931



15.8130, 15.7749, 16.5717



19.7350, 10.1664, 1.2550



1.6558, 0.8514, 0.1782



# Previews

## White Background



This preview shows how the XYZ color 20.7778, 12.8169, 84.5979 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

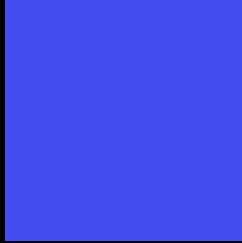
Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 20.7778, 12.8169, 84.5979 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

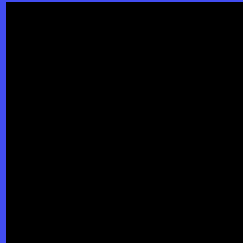
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

**XYZ 20.7778, 12.8169, 84.5979**

## **Background**



This preview shows how black text looks on a background with the XYZ color 20.7778, 12.8169, 84.5979.



This preview shows how white text looks on a background with the XYZ color 20.7778, 12.8169,



# 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

20.7778, 12.8169, 84.5979

### Protanopia

14.8435, 12.6300, 57.5326

### Deuteranopia

12.2942, 12.5199, 41.3038



## Tritanopia

8.8459, 12.4599, 19.0783

# Trichromacy



## Original Color

20.7778, 12.8169, 84.5979

## Protanomaly

16.3437, 12.2968, 66.4779

## Deuteranomaly

14.4841, 12.1001, 54.9982

## Tritanomaly

11.3552, 11.5739, 36.2858

# Monochromacy



## Original Color

20.7778, 12.8169, 84.5979

## Achromatopsia

10.1725, 10.7023, 11.6548

## Achromatomaly

12.1638, 10.7307, 28.6243

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 20.7778, 12.8169, 84.5979 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(66, 77, 241)` looks like.

```
.text, #text, p{  
    color:rgb(66, 77, 241)  
}
```

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(66, 77, 241) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(66, 77, 241) }
```

## Border

The CSS property to change the border of an element to XYZ 20.7778, 12.8169, 84.5979 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(66, 77, 241) }
```



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

```
.border{ border-color:rgb(66, 77, 241) }
```

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

Here you see how a box with a 4 pixel rgb(66, 77, 241) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(66, 77, 241); -webkit-box-  
shadow:4px 4px 4px 4px rgb(66, 77, 241);  
box-shadow:4px 4px 4px 4px rgb(66, 77,  
241) }
```

# Background

The CSS property to change the background color of an element to XYZ 20.7778, 12.8169, 84.5979 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(66, 77, 241) }
```

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

```
.background{ background-color: rgb(66, 77,  
241) }
```

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](#).

Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

@ConvertingColor