

# Converting Colors

XYZ(12.7840, 11.1997, 21.9100)

Have a look what the booklet for  
XYZ(12.7840, 11.1997, 21.9100)  
contains.

<b>XYZ(12.7840, 11.1997, 21.9100)</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(12.7840, 11.1997,  
21.9100)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	665780
RGB	102, 87, 128
RGB Percent	40%, 34%, 50%
CMY	0.6000, 0.6588, 0.4980
CMYK	0.20, 0.32, 0.00, 0.50
HSL	262°, 19%, 42%
HSV	262°, 32%, 50%
XYZ	12.7840, 11.1997, 21.9100
YIQ	96.1590, -4.2210, 15.9310

# Conversions

## Conversions Part 2

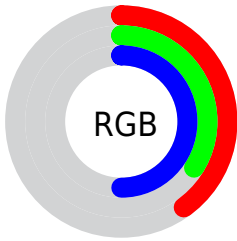
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	102, 87, 128
Decimal	6707072
CIE <sub>Lab</sub>	39.91, 15.17, -20.79
CIE <sub>LCh</sub>	40, 25.739, 306.109
Yxy	11.1997, 0.2786, 0.2440
Android (android.graphics.Color)	4284897152 (0xFF665780)
<b>YUV</b>	96.1590, 15.6976, 5.1226
Hunter-Lab	33.4660, 9.6216, -15.3907

# Details

The XYZ color **12.7840, 11.1997, 21.9100** is a dark color, and the websafe version is hex **666699**. A complement of this color would be **16.2498, 19.6374, 11.9512**, and the grayscale version is **11.1209, 11.7001, 12.7414**.

A 20% lighter version of the original color is **30.6126, 28.0975, 47.5260**, and **3.7606, 3.0047, 7.7789** is the 20% darker color. If you saturate the color by 10%, you get **10.9629, 8.8567, 21.5539**, and if you desaturate by 10%, it is **14.8797, 13.9576, 22.3321**.

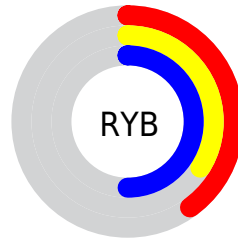
# Distribution



Red (40%)

Green (34%)

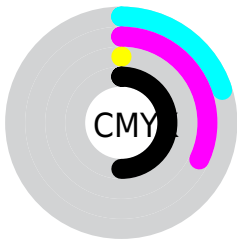
Blue (50%)



Red (40%)

Yellow (34%)

Blue (50%)

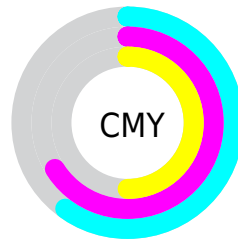


Cyan (20%)

Magenta (32%)

Yellow (0%)

Black (50%)



Cyan (60%)

Magenta (66%)

Yellow (50%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 12.7840, 11.1997, 21.9100 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 12.7840, 11.1997, 21.9100 by changing the saturation by 10% instead.



■ 12.7840, 11.1997,  
21.9100

■ 12.7840, 11.1997,  
21.9100

203.1944,  
199.0325, 275.0141

■ 7.3559, 6.2013,  
13.5931

■ 30.5198, 28.0289,  
47.4975

■ 3.7340, 2.9679,  
7.7027

■ 43.5583, 40.6284,  
65.6051

■ 1.5528, 1.1150,  
3.8203

■ 59.8643, 56.5305,  
87.8135

■ 0.3613, 0.0000,  
1.5273

■ 79.8031, 76.1195,  
114.5410

■ 0.0000, 0.0000,  
0.2381

■ 103.7402, 99.7798,  
146.2063

■ 0.0000, 0.0000,  
0.0000

132.0409,

127.8958, 183.2279

165.0705,  
160.8519, 226.0243

■ 12.7840, 11.1997,  
21.9100

■ 12.7840, 11.1997,  
21.9100

■ 10.9629, 8.8567,  
21.5539

■ 14.8797, 13.9576,  
22.3321

■ 9.4030, 6.9065,  
21.2597

■ 17.2604, 17.1483,  
22.8224

■ 8.0914, 5.3270,  
21.0240

■ 19.9373, 20.7903,  
23.3843

■ 7.0135, 4.0931,  
20.8426

■ 22.9204, 24.9006,  
24.0205

■ 6.1530, 3.1768,  
20.7111

■ 26.2196, 29.4954,  
24.7335

■ 5.4910, 2.5450,  
20.6240

■ 29.8441, 34.5898,  
25.5258

■ 5.0608, 2.1588,  
20.5722

■ 33.8026, 40.1986,  
26.3997

■ 38.1039, 46.3359,  
27.3576

■ 42.7559, 53.0150,  
28.4017

# Harmonies

## Analogous

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



11.0121, 11.1997, 24.7128



12.7840, 11.1997, 21.9100



14.0776, 11.1997, 16.5934

# Triad

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



12.7840, 11.1997, 21.9100



12.0868, 11.1997, 5.2667



7.6012, 11.1997, 13.2638

# Complementary

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



12.7840, 11.1997, 21.9100



16.2498, 19.6374, 11.9512

# 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.



7.8213, 11.1997, 8.6511



12.7840, 11.1997, 21.9100



10.2861, 11.1997, 4.8328

# Square

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



12.7840, 11.1997, 21.9100



13.6448, 11.1997, 7.2966



8.7589, 11.1997, 5.8833



8.1206, 11.1997, 18.9039



# Rectangle

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



12.7840, 11.1997, 21.9100



14.4230, 11.1997, 12.8694



8.7589, 11.1997, 5.8833



7.5920, 11.1997, 11.5437

# Sweetspot

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



12.7844, 11.2002, 21.9103



31.1987, 31.2866, 40.3508



13.8050, 15.5409, 22.6943



7.1795, 7.1560, 9.4212



62.3462, 65.5931, 71.4309



8.4577, 8.8982, 9.6901



# Same Dimension

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



12.7844, 11.2002, 21.9103



20.2629, 16.8189, 38.1347



15.3096, 12.5020, 22.0284



4.2459, 4.2824, 5.4161



5.0195, 2.1414, 20.3987



0.0000, 0.0000, 0.0000



# Inverse Universe

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



15.2912, 12.5982, 17.2488



25.4361, 19.7081, 28.3335



13.9692, 18.4617, 11.8445



4.4335, 4.3865, 5.0871



10.3067, 5.1424, 8.2050



0.0000, 0.0000, 0.0000



# Previews

## White Background



This preview shows how the XYZ color 12.7840, 11.1997, 21.9100 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 12.7840, 11.1997, 21.9100 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 12.7840, 11.1997, 21.9100**

## **Background**



This preview shows how black text looks on a background with the XYZ color 12.7840, 11.1997, 21.9100.



This preview shows how white text looks on a background with the XYZ color 12.7840, 11.1997,



# 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

12.7840, 11.1997, 21.9100

### Protanopia

11.6277, 11.3160, 23.7617

### Deuteranopia

11.4914, 11.2923, 21.6526



## Tritanopia

11.1444, 11.2902, 13.6484

# Trichromacy



## Original Color

12.7840, 11.1997, 21.9100

## Protanomaly

11.9576, 11.2447, 23.0129

## Deuteranomaly

11.8862, 11.2386, 21.6215

## Tritanomaly

11.7011, 11.2606, 16.3086

# Monochromacy



## Original Color

12.7840, 11.1997, 21.9100

## Achromatopsia

11.1181, 11.6971, 12.7381

## Achromatomaly

11.6581, 11.5081, 15.7942

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 12.7840, 11.1997, 21.9100 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(102, 87, 128)` looks like.

```
.text, #text, p{  
    color:rgb(102, 87, 128)  
}
```

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(102, 87, 128) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(102, 87, 128) }
```

## Border

The CSS property to change the border of an element to XYZ 12.7840, 11.1997, 21.9100 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(102, 87, 128) }
```



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

```
.border{ border-color:rgb(102, 87, 128) }
```

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

Here you see how a box with a 4 pixel rgb(102, 87, 128) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(102, 87, 128); -webkit-box-  
shadow:4px 4px 4px 4px rgb(102, 87, 128);  
box-shadow:4px 4px 4px 4px rgb(102, 87,  
128) }
```

# Background

The CSS property to change the background color of an element to XYZ 12.7840, 11.1997, 21.9100 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(102, 87, 128) }
```

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

```
.background{ background-color: rgb(102, 87,  
128) }
```

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