

# Converting Colors

XYZ(31.9159, 47.4867, 16.9858)

Have a look what the booklet for  
XYZ(31.9159, 47.4867, 16.9858)  
contains.

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# Color

**XYZ(31.9770, 47.6295,  
16.9592)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	81CA59
RGB	129, 202, 89
RGB Percent	51%, 79%, 35%
CMY	0.4941, 0.2078, 0.6510
CMYK	0.36, 0.00, 0.56, 0.21
HSL	99°, 52%, 57%
HSV	99°, 56%, 79%
XYZ	31.9770, 47.6295, 16.9592
YIQ	167.2910, -7.2350, -50.6190

# Conversions

## Conversions Part 2

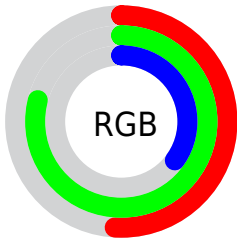
<b>Format</b>	<b>Color</b>
<b>RYB</b>	89, 202, 162
Decimal	8505945
CIELab	74.59, -42.72, 48.58
CIELCh	75, 64.697, 131.329
Yxy	47.6295, 0.3311, 0.4932
Android (android.graphics.Color)	4286696025 (0xFF81CA59)
YUV	167.2910, -38.5975, -33.5812
Hunter-Lab	69.0141, -38.0686, 33.7403

# Details

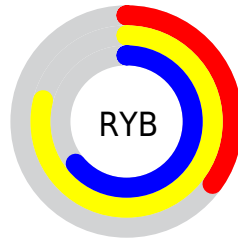
The XYZ color **31.9770, 47.6295, 16.9592** is a dark color, and the websafe version is hex **99CC66**. The color can be described as middle muted chartreuse. A complement of this color would be **29.1355, 19.0918, 58.0293**, and the grayscale version is **37.0587, 38.9886, 42.4586**.

A 20% lighter version of the original color is **60.6501, 83.7873, 38.5672**, and **13.5762, 22.4507, 5.2869** is the 20% darker color. If you saturate the color by 10%, you get **29.3854, 46.3799, 13.0016**, and if you desaturate by 10%, it is **35.0569, 49.1069, 22.1564**.

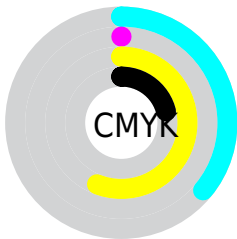
# Distribution



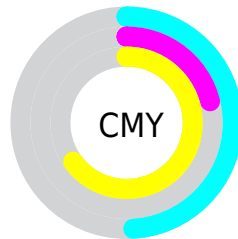
- Red (51%)
- Green (79%)
- Blue (35%)



- Red (35%)
- Yellow (79%)
- Blue (64%)



- Cyan (36%)
- Magenta (0%)
- Yellow (56%)
- Black (21%)




- Cyan (49%)
- Magenta (21%)
- Yellow (65%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 31.9770, 47.6295, 16.9592 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 31.9770, 47.6295, 16.9592 by changing the saturation by 10% instead.




 31.9770, 47.6295,  
16.9592


 31.9770, 47.6295,  
16.9592


302.7616,  
377.3217, 246.9731

 21.4994, 33.5336,  
10.0438


 62.1405, 86.6525,  
39.0453

 13.6041, 22.5355,  
5.3220


 82.5570, 112.3484,  
55.0530

 7.9257, 14.2509,  
2.3754


 107.0173,  
142.6797, 74.9286

 4.0988, 8.2954,  
0.7730

 135.8866,  
178.0308, 99.0906

 1.7582, 4.2845,  
0.0000

169.5304,  
218.7862, 127.9575

 0.4923, 1.8340,  
0.0000

208.3139,

 0.0000, 0.5082,

265.3302, 161.9479

0.0000

252.6025,  
318.0472, 201.4802

■ 0.0000, 0.0000,  
0.0000

■ 31.9770, 47.6295,  
16.9592

■ 31.9770, 47.6295,  
16.9592

■ 29.3854, 46.3799,  
13.0016

■ 35.0569, 49.1069,  
22.1564

■ 27.2496, 45.3391,  
10.1770

■ 38.6479, 50.8174,  
28.6817

■ 25.5378, 44.4950,  
8.3664

■ 42.7755, 52.7738,  
36.6192

■ 24.2108, 43.8305,  
7.4196

■ 47.4622, 54.9862,  
46.0453

■ 23.7569, 43.6017,  
7.1638

■ 52.7293, 57.4638,  
57.0306

■ 58.5968, 60.2155,  
69.6415

■ 65.0838, 63.2499,  
83.9404

■ 72.2083, 66.5749,  
99.9863

■ 77.3370, 69.1381,  
103.8766

# Harmonies

## Analogous

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



40.9923, 47.6295, 10.8612



31.9770, 47.6295, 16.9592



27.1236, 47.6295, 33.8446

# Triad

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



31.9770, 47.6295, 16.9592



38.4421, 47.6295, 140.0055



71.1126, 47.6295, 40.2028

# Complementary

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



31.9770, 47.6295, 16.9592



29.1355, 19.0918, 58.0293

# Split Complementary

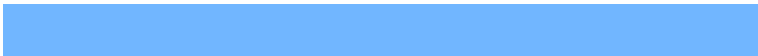
Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



70.1096, 47.6295, 75.3476



31.9770, 47.6295, 16.9592



49.8363, 47.6295, 144.1873

# Square

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



31.9770, 47.6295, 16.9592



30.3881, 47.6295, 107.1214



61.8157, 47.6295, 116.8667



64.3574, 47.6295, 19.8823

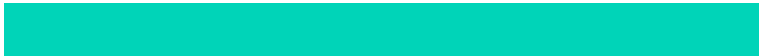


# Rectangle

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



31.9770, 47.6295, 16.9592



26.2949, 47.6295, 53.3698



61.8157, 47.6295, 116.8667



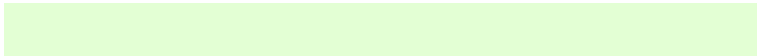
71.6985, 47.6295, 50.3798

# Sweetspot

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



31.9781, 47.6316, 16.9602



79.2762, 92.5857, 75.7487



38.8315, 38.6184, 14.8593



16.6112, 19.6487, 15.4875



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.



31.9781, 47.6316, 16.9602



48.9769, 78.1480, 20.9211



27.7439, 45.3680, 20.4100



11.4365, 12.7269, 11.9332



15.3748, 28.1013, 4.6138



0.8752, 1.4920, 0.2419



# Inverse Universe

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



29.1355, 19.0918, 58.0293



43.6156, 25.1231, 97.1582



36.8939, 23.2876, 49.5291



11.2873, 11.1974, 14.1368



12.9333, 5.8749, 36.4086



0.7477, 0.3446, 1.8820



# Previews

## White Background



This preview shows how the XYZ color 31.9770, 47.6295, 16.9592 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 31.9770, 47.6295, 16.9592 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

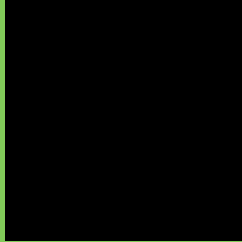
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

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

**XYZ 31.9770, 47.6295, 16.9592**

## **Background**



This preview shows how black text looks on a background with the XYZ color 31.9770, 47.6295, 16.9592.



This preview shows how white text looks on a background with the XYZ color 31.9770, 47.6295,



# 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

31.9770, 47.6295, 16.9592

### Protanopia

43.1234, 47.1880, 15.0190

### Deuteranopia

48.0342, 46.9825, 17.8461



## Tritanopia

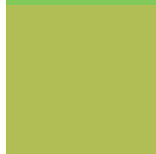
41.6456, 47.5306, 64.7370

# Trichromacy



## Original Color

31.9770, 47.6295, 16.9592



## Protanomaly

37.9576, 46.7129, 15.6102



## Deuteranomaly

40.1471, 45.9079, 17.3348



## Tritanomaly

36.8872, 46.8906, 41.7570

# Monochromacy



## Original Color

31.9770, 47.6295, 16.9592



## Achromatopsia

36.7301, 38.6429, 42.0822



## Achromatomaly

34.1183, 41.2789, 30.5955

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 31.9770, 47.6295, 16.9592 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(129, 202, 89)` looks like.

```
.text, #text, p{  
    color:rgb(129, 202, 89)  
}
```

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(129, 202, 89) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(129, 202, 89) }
```

## Border

The CSS property to change the border of an element to XYZ 31.9770, 47.6295, 16.9592 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(129, 202, 89) }
```



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

```
.border{ border-color:rgb(129, 202, 89) }
```

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

Here you see how a box with a 4 pixel rgb(129, 202, 89) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(129, 202, 89); -webkit-box-  
shadow:4px 4px 4px 4px rgb(129, 202, 89);  
box-shadow:4px 4px 4px 4px rgb(129, 202,  
89) }
```

# Background

The CSS property to change the background color of an element to XYZ 31.9770, 47.6295, 16.9592 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(129, 202, 89) }
```

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

```
.background{ background-color: rgb(129,  
202, 89) }
```

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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