

# Converting Colors

XYZ(31.8771, 44.4357, 20.8068)

Have a look what the booklet for  
XYZ(31.8771, 44.4357, 20.8068)  
contains.

<b>XYZ(31.8771, 44.4357, 20.8068)</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(31.8771, 44.4357,  
20.8068)**

# Conversions

## Conversions Part 1

Format	Color
Hex	88C16B
RGB	136, 193, 107
RGB Percent	53%, 76%, 42%
CMY	0.4667, 0.2431, 0.5804
CMYK	0.30, 0.00, 0.45, 0.24
HSL	100°, 41%, 59%
HSV	100°, 45%, 76%
XYZ	31.8771, 44.4357, 20.8068
YIQ	166.1530, -6.3660, -38.8300

# Conversions

## Conversions Part 2

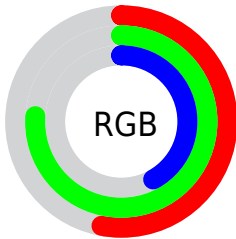
Format	Color
<a href="#">RYB</a>	<a href="#">107, 193, 164</a>
Decimal	<a href="#">8962411</a>
CIELab	<a href="#">72.52, -34.16, 37.42</a>
CIELCh	<a href="#">73, 50.665, 132.389</a>
Yxy	<a href="#">44.4357, 0.3282, 0.4575</a>
Android (android.graphics.Color)	<a href="#">4287152491</a> ( <a href="#">0xFF88C16B</a> )
YUV	<a href="#">166.1530, -29.1624, -26.4442</a>
Hunter-Lab	<a href="#">66.6601, -31.2959, 28.1557</a>

# Details

The XYZ color **31.8771, 44.4357, 20.8068** is a dark color, and the websafe version is hex **99CC66**. A complement of this color would be **30.1953, 22.2596, 53.1596**, and the grayscale version is **36.4593, 38.3581, 41.7719**.

A 20% lighter version of the original color is **62.0166, 81.9856, 45.8139**, and **13.5384, 20.5996, 7.1335** is the 20% darker color. If you saturate the color by 10%, you get **29.0181, 43.0677, 15.9514**, and if you desaturate by 10%, it is **35.2130, 46.0261, 26.8693**.

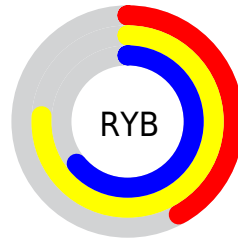
# Distribution



Red (53%)

Green (76%)

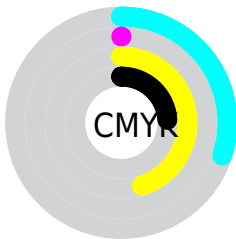
Blue (42%)



Red (42%)

Yellow (76%)

Blue (64%)

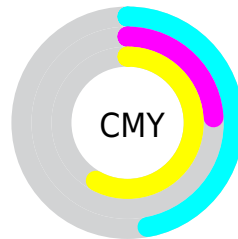


Cyan (30%)

Magenta (0%)

Yellow (45%)

Black (24%)



Cyan (47%)

Magenta (24%)

Yellow (58%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 31.8771, 44.4357, 20.8068 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 31.8771, 44.4357, 20.8068 by changing the saturation by 10% instead.



■ 31.8771, 44.4357,  
20.8068

■ 31.8771, 44.4357,  
20.8068

302.3143,  
364.4833, 268.9972

■ 21.4227, 31.0132,  
12.7930

■ 61.9849, 81.8730,  
45.6424

■ 13.5476, 20.6089,  
7.1571

■ 82.3690, 106.6565,  
63.3012

■ 7.8863, 12.8384,  
3.4806

■ 106.7937,  
135.9958, 85.0122

■ 4.0734, 7.3174,  
1.3450

■ 135.6244,  
170.2754, 111.1938

■ 1.7438, 3.6614,  
0.0982

169.2265,  
209.8795, 142.2645

■ 0.4834, 1.4860,  
0.0000

207.9653,

■ 0.0000, 0.2788,

255.1926, 178.6430

0.0000

252.2061,  
306.5991, 220.7477

■ 0.0000, 0.0000,  
0.0000

■ 31.8771, 44.4357,  
20.8068

■ 31.8771, 44.4357,  
20.8068

■ 29.0181, 43.0677,  
15.9514

■ 35.2130, 46.0261,  
26.8693

■ 26.6087, 41.9057,  
12.2195

■ 39.0446, 47.8428,  
34.2094

■ 24.6237, 40.9401,  
9.5214


■ 43.3937, 49.8971,  
42.8954


■ 23.0335, 40.1578,  
7.7522


■ 48.2795, 52.1975,  
52.9902

■ 21.8036, 39.5439,  
6.7852


■ 53.7205, 54.7521,  
64.5526

 21.2559, 39.2682,  
6.4592

 59.7340, 57.5688,  
77.6379

 66.3368, 60.6550,  
92.2987

 72.4960, 63.5983,  
103.0625

 76.9534, 65.8962,  
103.2711

# Harmonies

## Analogous

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



38.7268, 44.4357, 14.9301



31.8771, 44.4357, 20.8068



28.1423, 44.4357, 35.2197

# Triad

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



31.8771, 44.4357, 20.8068



37.3462, 44.4357, 110.3752



60.8915, 44.4357, 38.7634

# Complementary

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



31.8771, 44.4357, 20.8068



30.1953, 22.2596, 53.1596

# 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.



60.3866, 44.4357, 64.4747



31.8771, 44.4357, 20.8068



45.9485, 44.4357, 112.3558

# Square

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



31.8771, 44.4357, 20.8068



30.9871, 44.4357, 88.6806



54.6234, 44.4357, 93.4112



55.9201, 44.4357, 22.6258



# Rectangle

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



31.8771, 44.4357, 20.8068



27.5561, 44.4357, 50.4197



54.6234, 44.4357, 93.4112



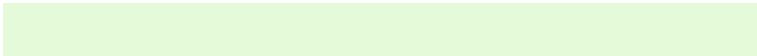
61.3741, 44.4357, 46.4018

# Sweetspot

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



31.8782, 44.4376, 20.8078



78.8441, 89.8944, 79.1235



37.7275, 38.5598, 19.3649



16.5188, 19.0986, 16.1691



92.9021, 97.7402, 106.4391



19.4759, 20.4902, 22.3138



# Same Dimension

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



31.8782, 44.4376, 20.8078



52.3149, 77.2971, 29.1322



28.5189, 42.6215, 24.4620



10.2574, 11.4201, 10.7256



14.2141, 26.1565, 4.2995



0.6884, 1.1684, 0.1892



# Inverse Universe

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



30.1953, 22.2596, 53.1596



48.8976, 32.7379, 94.1021



35.5002, 25.1535, 46.2196



10.1568, 10.0720, 12.6936



12.4036, 5.6547, 33.9943



0.6069, 0.2809, 1.4721



# Previews

## White Background



This preview shows how the XYZ color 31.8771, 44.4357, 20.8068 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 31.8771, 44.4357, 20.8068 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 31.8771, 44.4357, 20.8068**

## **Background**



This preview shows how black text looks on a background with the XYZ color 31.8771, 44.4357, 20.8068.



This preview shows how white text looks on a background with the XYZ color 31.8771, 44.4357,



# 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

31.8771, 44.4357, 20.8068

### Protanopia

40.3192, 43.8532, 18.6514

### Deuteranopia

44.9002, 43.8643, 21.7230



## Tritanopia

39.5892, 44.3822, 59.3034

# Trichromacy



## Original Color

31.8771, 44.4357, 20.8068

## Protanomaly

36.6152, 43.7305, 19.3430

## Deuteranomaly

39.0393, 43.4276, 21.3637

## Tritanomaly

36.1482, 44.2407, 41.7561

# Monochromacy



## Original Color

31.8771, 44.4357, 20.8068

## Achromatopsia

36.2450, 38.1326, 41.5264

## Achromatomaly

34.1537, 40.0636, 32.7210

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 31.8771, 44.4357, 20.8068 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(136, 193, 107)` looks like.

```
.text, #text, p{  
    color:rgb(136, 193, 107)  
}
```

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(136, 193, 107) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(136, 193, 107) }
```

## Border

The CSS property to change the border of an element to XYZ 31.8771, 44.4357, 20.8068 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(136, 193, 107) }
```



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

```
.border{ border-color:rgb(136, 193, 107) }
```

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

Here you see how a box with a 4 pixel `rgb(136, 193, 107)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(136, 193, 107); -webkit-box-  
shadow:4px 4px 4px 4px rgb(136, 193, 107);  
box-shadow:4px 4px 4px 4px rgb(136, 193,  
107) }
```

# Background

The CSS property to change the background color of an element to XYZ 31.8771, 44.4357, 20.8068 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(136, 193, 107) }
```

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

```
.background{ background-color: rgb(136,  
193, 107) }
```

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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