

# Converting Colors

XYZ(51.8993, 46.0042, 13.3252)

Have a look what the booklet for  
XYZ(51.8993, 46.0042, 13.3252)  
contains.

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# Color

**XYZ(51.7806, 45.9775,  
13.3531)**

# Conversions

## Conversions Part 1

Format	Color
Hex	F4A34E
RGB	244, 163, 78
RGB Percent	96%, 64%, 31%
CMY	0.0431, 0.3608, 0.6941
CMYK	0.00, 0.33, 0.68, 0.04
HSL	31°, 88%, 63%
HSV	31°, 68%, 96%
XYZ	51.7806, 45.9775, 13.3531
YIQ	177.5290, 75.5610, -9.2630

# Conversions

## Conversions Part 2

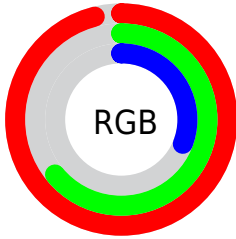
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	236, 244, 78
Decimal	16032590
CIE Lab	73.53, 22.45, 55.00
CIE LCh	74, 59.405, 67.792
Yxy	45.9775, 0.4660, 0.4138
Android (android.graphics.Color)	4294222670 (0xFFFF4A34E)
YUV	177.5290, -49.0678, 58.2951
Hunter-Lab	67.8067, 17.6498, 35.7888

# Details

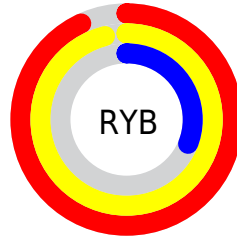
The XYZ color **51.7806, 45.9775, 13.3531** is a light color, and the websafe version is hex **FF9933**. The color can be described as light washed orange. A complement of this color would be **31.8685, 32.9461, 90.2672**, and the grayscale version is **42.2920, 44.4945, 48.4545**.

A 20% lighter version of the original color is **70.3407, 73.0145, 31.5050**, and **25.3883, 21.5063, 3.7327** is the 20% darker color. If you saturate the color by 10%, you get **49.0476, 41.6615, 8.8977**, and if you desaturate by 10%, it is **55.0391, 50.8259, 19.5847**.

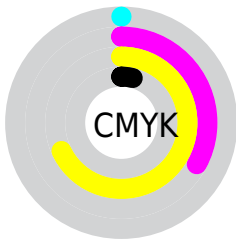
# Distribution



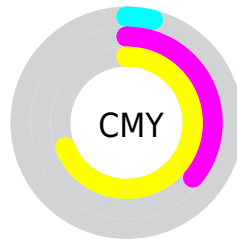
- Red (96%)
- Green (64%)
- Blue (31%)



- Red (93%)
- Yellow (96%)
- Blue (31%)



- Cyan (0%)
- Magenta (33%)
- Yellow (68%)
- Black (4%)



- Cyan (4%)
- Magenta (36%)
- Yellow (69%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 51.7806, 45.9775, 13.3531 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 51.7806, 45.9775, 13.3531 by changing the saturation by 10% instead.



51.7806, 45.9775,  
13.3531

51.7806, 45.9775,  
13.3531

383.9269,  
370.7182, 224.4551

37.0538, 32.2281,  
7.5386

91.9837, 84.1853,  
32.6371

25.4230, 21.5358,  
3.7176

118.1908,  
109.4125, 46.9437

16.5229, 13.5162,  
1.4717

148.9553,  
139.2344, 64.9181

9.9881, 7.7849,  
0.1967

184.6425,  
174.0354, 86.9787

5.4533, 3.9576,  
0.0000

225.6180,  
214.1998, 113.5442

2.5531, 1.6499,  
0.0000

272.2470,

0.9221, 0.3909,

260.1122, 145.0331

0.0000

324.8948,  
312.1569, 181.8639

■ 0.0000, 0.0000,  
0.0000

■ 51.7806, 45.9775,  
13.3531

■ 51.7806, 45.9775,  
13.3531

■ 49.0476, 41.6615,  
8.8977

■ 55.0391, 50.8259,  
19.5847

■ 46.7934, 37.8449,  
6.0141

■ 58.8575, 56.2232,  
27.7612


■ 44.9614, 34.4976,  
4.4269


■ 63.2700, 62.1930,  
38.0341


■ 44.6351, 33.8871,  
4.1883

■ 68.3070, 68.7554,  
50.5391

■ 73.9966, 75.9291,  
65.4006

 80.3648, 83.7318,  
82.7334

 87.4362, 92.1805,  
102.6449

 91.1181, 97.9730,  
108.7160

# Harmonies

## Analogous

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



61.6668, 45.9775, 22.3401



51.7806, 45.9775, 13.3531



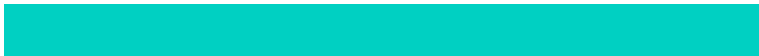
41.0210, 45.9775, 11.8572

# Triad

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



51.7806, 45.9775, 13.3531



26.6000, 45.9775, 58.3130



57.2701, 45.9775, 111.0333

# Complementary

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



51.7806, 45.9775, 13.3531



31.8685, 32.9461, 90.2672

# 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.



46.4936, 45.9775, 131.9331



51.7806, 45.9775, 13.3531



29.6137, 45.9775, 94.4877

# Square

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



51.7806, 45.9775, 13.3531



27.5527, 45.9775, 31.2395



36.5075, 45.9775, 124.8994



65.1732, 45.9775, 75.2393



# Rectangle

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



51.7806, 45.9775, 13.3531



34.9499, 45.9775, 14.3634



36.5075, 45.9775, 124.8994



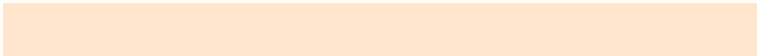
53.8012, 45.9775, 120.5737

# Sweetspot

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



51.7817, 45.9798, 13.3540



80.4682, 82.2780, 68.7668



46.4657, 27.2554, 36.5304



16.8373, 17.1262, 13.7031



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.



51.7817, 45.9798, 13.3540



53.1185, 44.2312, 8.3123



71.0339, 84.4842, 19.7714



17.2008, 17.8858, 17.3433



24.4076, 18.7008, 2.3232



2.2481, 1.8494, 0.2385



# Inverse Universe

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



31.8685, 32.9461, 90.2672



29.7501, 28.9544, 98.6285



22.1957, 13.6005, 87.0429



16.2487, 17.2616, 21.0180



12.6051, 11.0040, 47.9976



1.2104, 1.1722, 4.2527



# Previews

## White Background



This preview shows how the XYZ color 51.7806, 45.9775, 13.3531 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 51.7806, 45.9775, 13.3531 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 51.7806, 45.9775, 13.3531

## Background



This preview shows how black text looks on a background with the XYZ color 51.7806, 45.9775, 13.3531.



This preview shows how white text looks on a background with the XYZ color 51.7806, 45.9775,



# 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

51.7806, 45.9775, 13.3531

### Protanopia

42.2115, 46.1053, 15.0619

### Deuteranopia

47.1084, 46.0344, 13.2401



## Tritanopia

57.7715, 46.1518, 41.4606

# Trichromacy



## Original Color

51.7806, 45.9775, 13.3531

## Protanomaly

45.2743, 45.6330, 14.4045

## Deuteranomaly

48.8062, 46.0676, 13.3407

## Tritanomaly

55.0020, 45.7639, 28.1247

# Monochromacy



## Original Color

51.7806, 45.9775, 13.3531

## Achromatopsia

42.3164, 44.5201, 48.4824

## Achromatomaly

44.1832, 44.3967, 31.8319

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 51.7806, 45.9775, 13.3531 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(244, 163, 78)` looks like.

```
.text, #text, p{  
    color:rgb(244, 163, 78)  
}
```

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(244, 163, 78) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(244, 163, 78) }
```

## Border

The CSS property to change the border of an element to XYZ 51.7806, 45.9775, 13.3531 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(244, 163, 78) }
```



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

```
.border{ border-color:rgb(244, 163, 78) }
```

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

Here you see how a box with a 4 pixel rgb(244, 163, 78) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(244, 163, 78); -webkit-box-  
shadow:4px 4px 4px 4px rgb(244, 163, 78);  
box-shadow:4px 4px 4px 4px rgb(244, 163,  
78) }
```

# Background

The CSS property to change the background color of an element to XYZ 51.7806, 45.9775, 13.3531 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(244, 163, 78) }
```

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

```
.background{ background-color: rgb(244,  
163, 78) }
```

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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