

# Converting Colors

XYZ(45.9874, 36.5880, 4.6384)

Have a look what the booklet for  
XYZ(45.9874, 36.5880, 4.6384)  
contains.

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# Color

**XYZ(45.9722, 36.5610,  
4.6340)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	F48700
RGB	244, 135, 0
RGB Percent	96%, 53%, 0%
CMY	0.0431, 0.4706, 1.0000
CMYK	0.00, 0.45, 1.00, 0.04
HSL	33°, 100%, 48%
HSV	33°, 100%, 96%
XYZ	45.9722, 36.5610, 4.6340
YIQ	152.2010, 108.2990, -18.8770

# Conversions

## Conversions Part 2

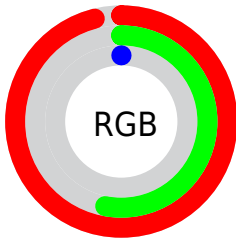
Format	Color
<a href="#">RYB</a>	197, 244, 0
Decimal	16025344
CIELab	66.95, 34.96, 73.18
CIElCh	67, 81.103, 64.468
Yxy	36.5610, 0.5274, 0.4194
Android (android.graphics.Color)	4294215424 (0xFFFF48700)
YUV	152.2010, -75.0351, 80.5077
Hunter-Lab	60.4657, 29.8990, 37.7821

# Details

The XYZ color **45.9722, 36.5610, 4.6340** is a dark color, and the websafe version is hex **FF9900**. The color can be described as dark saturated orange. A complement of this color would be **21.7981, 17.4696, 87.8104**, and the grayscale version is **30.2150, 31.7885, 34.6177**.

A 20% lighter version of the original color is **60.6402, 58.1362, 14.3287**, and **22.2264, 16.1644, 1.9486** is the 20% darker color. If you saturate the color by 10%, you get **45.9722, 36.5615, 4.6341**, and if you desaturate by 10%, it is **47.7417, 39.8297, 6.0584**.

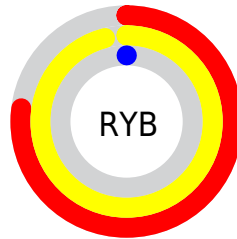
# Distribution



Red (96%)

Green (53%)

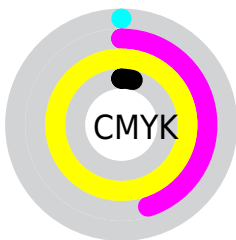
Blue (0%)



Red (77%)

Yellow (96%)

Blue (0%)

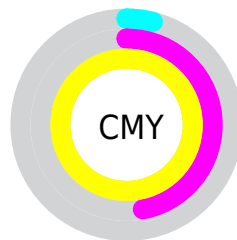


Cyan (0%)

Magenta (45%)

Yellow (100%)

Black (4%)



Cyan (4%)

Magenta (47%)


Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 45.9722, 36.5610, 4.6340 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 45.9722, 36.5610, 4.6340 by changing the saturation by 10% instead.





 45.9722, 36.5610,  
4.6340


 45.9722, 36.5610,  
4.6340


361.4147,  
331.4060, 155.0312

 32.4284, 24.8678,  
1.9792


 83.4055, 69.8971,  
15.4474


 21.8461, 15.9786,  
0.5424


 108.0257, 92.3087,  
24.4431

 13.8598, 9.5090,  
0.0000


 137.0688,  
119.0620, 36.3895

 8.1043, 5.0746,  
0.0000

 170.9002,  
150.5412, 51.7052

 4.2141, 2.2911,  
0.0000

 209.8850,  
187.1308, 70.8086

 1.8240, 0.7690,  
0.0000

 254.3889,


 0.5320, 0.0000,


229.2152, 94.1184


0.0000


 304.7769,  
277.1788, 122.0531


 0.0000, 0.0000,  
0.0000


 45.9722, 36.5610,  
4.6340


 45.9722, 36.5610,  
4.6340


 45.9722, 36.5615,  
4.6341

 47.7417, 39.8297,  
6.0584

 49.8826, 43.5017,  
8.6525

 52.4660, 47.6138,  
12.7652

 55.5355, 52.1900,  
18.6059

 59.1281, 57.2515,  
26.3502

■ 63.2766, 62.8177,  
36.1520

■ 68.0108, 68.9063,  
48.1493

■ 73.3578, 75.5341,  
62.4679

■ 79.3432, 82.7167,  
79.2242

# Harmonies

## Analogous

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



58.1208, 36.5610, 12.4645



45.9722, 36.5610, 4.6340



32.9402, 36.5610, 3.2680

# Triad

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



45.9722, 36.5610, 4.6340



16.1034, 36.5610, 45.3213



49.9258, 36.5610, 125.8227

# Complementary

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



45.9722, 36.5610, 4.6340



21.7981, 17.4696, 87.8104

# 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.



36.6251, 36.5610, 152.7022



45.9722, 36.5610, 4.6340



18.6722, 36.5610, 91.7575

# Square

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



45.9722, 36.5610, 4.6340



17.4808, 36.5610, 17.1709



25.5213, 36.5610, 137.5313



60.7554, 36.5610, 76.7176



# Rectangle

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



45.9722, 36.5610, 4.6340



25.8467, 36.5610, 4.5084



25.5213, 36.5610, 137.5313



45.4941, 36.5610, 138.7498

# Sweetspot

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



45.9730, 36.5630, 4.6346



75.1369, 76.1159, 53.1149



40.1120, 20.3548, 16.5112



15.5921, 15.6682, 10.1055



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.



45.9730, 36.5630, 4.6346



50.7780, 40.3360, 5.1093



65.5643, 81.8232, 12.3382



17.2594, 18.0029, 17.3628



25.1359, 20.1574, 2.5660



2.3117, 1.9766, 0.2597



# Inverse Universe

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



21.7981, 17.4696, 87.8104



24.0573, 19.2346, 97.0524



16.4837, 6.6115, 85.9947



16.1906, 17.1455, 20.9986



11.9840, 9.7618, 47.7906



1.1542, 1.0598, 4.2340



# Previews

## White Background



This preview shows how the XYZ color 45.9722, 36.5610, 4.6340 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 45.9722, 36.5610, 4.6340 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 45.9722, 36.5610, 4.6340**

## **Background**



This preview shows how black text looks on a background with the XYZ color 45.9722, 36.5610, 4.6340.



This preview shows how white text looks on a background with the XYZ color 45.9722, 36.5610,



# 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

45.9722, 36.5610, 4.6340

### Protanopia

33.1689, 36.7918, 6.0152

### Deuteranopia

37.1749, 36.5645, 5.0983



## Tritanopia

50.8309, 36.7827, 26.9749

# Trichromacy



## Original Color

45.9722, 36.5610, 4.6340

## Protanomaly

36.9175, 35.9333, 5.3708

## Deuteranomaly

40.1051, 36.3955, 4.9113

## Tritanomaly

47.8477, 36.1305, 13.0464

# Monochromacy



## Original Color

45.9722, 36.5610, 4.6340

## Achromatopsia

29.8446, 31.3989, 34.1934

## Achromatomaly

32.4441, 31.7351, 15.7248

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 45.9722, 36.5610, 4.6340 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, 135, 0)` looks like.

```
.text, #text, p{  
    color:rgb(244, 135, 0)  
}
```

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, 135, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(244, 135, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 45.9722, 36.5610, 4.6340 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, 135, 0) }
```



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

```
.border{ border-color:rgb(244, 135, 0) }
```

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

Here you see how a box with a 4 pixel `rgb(244, 135, 0)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(244, 135, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(244, 135, 0);  
box-shadow:4px 4px 4px 4px rgb(244, 135,  
0) }
```

# Background

The CSS property to change the background color of an element to XYZ 45.9722, 36.5610, 4.6340 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(244, 135, 0) }
```

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

```
.background{ background-color: rgb(244,  
135, 0) }
```

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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