

# Converting Colors

XYZ(45.7300, 36.9772, 5.1425)

Have a look what the booklet for  
XYZ(45.7300, 36.9772, 5.1425)  
contains.

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# Color

**XYZ(45.7857, 37.0859,  
5.1606)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	F28A0E
RGB	242, 138, 14
RGB Percent	95%, 54%, 5%
CMY	0.0510, 0.4588, 0.9451
CMYK	0.00, 0.43, 0.94, 0.05
HSL	33°, 90%, 50%
HSV	33°, 94%, 95%
XYZ	45.7857, 37.0859, 5.1606
YIQ	154.9600, 101.7880, -16.5160

# Conversions

## Conversions Part 2

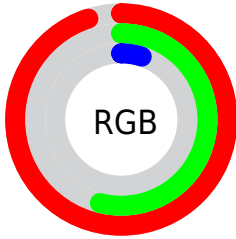
<b>Format</b>	<b>Color</b>
R <sub>Y</sub> B	205, 242, 14
Decimal	15895054
CIE Lab	67.34, 32.72, 71.31
CIE LCh	67, 78.463, 65.352
Yxy	37.0859, 0.5201, 0.4213
Android (android.graphics.Color)	4294085134 (0xFFFF28A0E)
YUV	154.9600, -69.4933, 76.3341
Hunter-Lab	60.8982, 27.6316, 37.6044

# Details

The XYZ color **45.7857, 37.0859, 5.1606** is a dark color, and the websafe version is hex **FF9933**. The color can be described as dark saturated orange. A complement of this color would be **22.6867, 19.4613, 86.5644**, and the grayscale version is **31.4059, 33.0414, 35.9821**.

A 20% lighter version of the original color is **61.5009, 59.5238, 15.6449**, and **21.9986, 16.4001, 2.0061** is the 20% darker color. If you saturate the color by 10%, you get **44.8171, 35.2760, 4.4468**, and if you desaturate by 10%, it is **47.7255, 40.5277, 7.1587**.

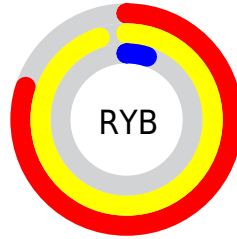
# Distribution



Red (95%)

Green (54%)

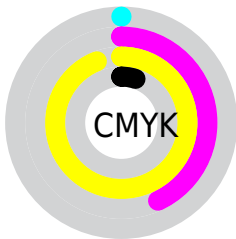
Blue (5%)



Red (80%)

Yellow (95%)

Blue (5%)

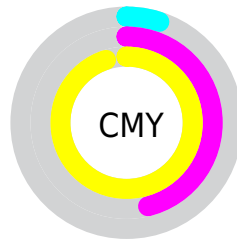


Cyan (0%)

Magenta (43%)

Yellow (94%)

Black (5%)



Cyan (5%)

Magenta (46%)


Yellow (95%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 45.7857, 37.0859, 5.1606 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 45.7857, 37.0859, 5.1606 by changing the saturation by 10% instead.





 45.7857, 37.0859,  
5.1606


 45.7857, 37.0859,  
5.1606

360.6768,  
333.6823, 160.3638

 32.2807, 25.2740,  
2.2814


 83.1280, 70.7049,  
16.6086

 21.7325, 16.2813,  
0.7208


 107.6960, 93.2808,  
26.0144

 13.7760, 9.7234,  
0.0000


 136.6823,  
120.2134, 38.4329

 8.0457, 5.2160,  
0.0000

 170.4524,  
151.8873, 54.2826

 4.1763, 2.3745,  
0.0000

 209.3715,  
188.6867, 73.9819

 1.8023, 0.8127,  
0.0000

 253.8050,

 0.5191, 0.0000,

230.9960, 97.9496

0.0000

304.1184,  
279.1998, 126.6040

0.0000, 0.0000,  
0.0000

45.7857, 37.0859,  
5.1606

45.7857, 37.0859,  
5.1606

44.8171, 35.2760,  
4.4468

47.7255, 40.5277,  
7.1587

50.0838, 44.4000,  
10.5469

52.9080, 48.7307,  
15.5507

56.2371, 53.5421,  
22.3545

60.1053, 58.8542,  
31.1171

64.5429, 64.6858,  
41.9798

69.5779, 71.0539,  
55.0707

75.2362, 77.9749,  
70.5077

81.5419, 85.4642,  
88.4000

# Harmonies

## Analogous

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



57.6427, 37.0859, 12.9256



45.7857, 37.0859, 5.1606



33.1384, 37.0859, 3.8372

# Triad

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



45.7857, 37.0859, 5.1606



16.8910, 37.0859, 46.8695



50.3729, 37.0859, 121.9273

# Complementary

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



45.7857, 37.0859, 5.1606



22.6867, 19.4613, 86.5644

# 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.



37.4475, 37.0859, 148.5352



45.7857, 37.0859, 5.1606



19.5673, 37.0859, 92.0189

# Square

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



45.7857, 37.0859, 5.1606



18.1480, 37.0859, 18.5987



26.4672, 37.0859, 135.2757



60.6849, 37.0859, 74.7264



# Rectangle

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



45.7857, 37.0859, 5.1606



26.2555, 37.0859, 5.2482



26.4672, 37.0859, 135.2757



46.0924, 37.0859, 134.5086

# Sweetspot

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



45.7865, 37.0879, 5.1613



76.0862, 77.1766, 56.0143



40.1896, 20.5573, 19.7480



15.7670, 15.8606, 10.6487



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.



45.7865, 37.0879, 5.1613



50.4275, 39.6350, 4.9925



65.8942, 81.0956, 12.5958



16.4852, 17.1835, 16.5976



24.2148, 19.2277, 2.4350



2.1138, 1.7983, 0.2357



# Inverse Universe

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



22.6867, 19.4613, 86.5644



24.3314, 19.7828, 97.1438



16.5064, 6.8912, 84.4639



15.4912, 16.4165, 20.0738



11.7604, 9.7450, 46.3890



1.0766, 1.0072, 3.8919



# Previews

## White Background



This preview shows how the XYZ color 45.7857, 37.0859, 5.1606 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 45.7857, 37.0859, 5.1606 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 45.7857, 37.0859, 5.1606**

## **Background**



This preview shows how black text looks on a background with the XYZ color 45.7857, 37.0859, 5.1606.



This preview shows how white text looks on a background with the XYZ color 45.7857, 37.0859,



# 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

45.7857, 37.0859, 5.1606

### Protanopia

33.6276, 37.2905, 6.2896

### Deuteranopia

37.9009, 37.1868, 5.1802



## Tritanopia

50.6644, 37.0475, 28.5253

# Trichromacy



## Original Color

45.7857, 37.0859, 5.1606

## Protanomaly

37.3012, 36.6150, 5.7632

## Deuteranomaly

40.2900, 36.7215, 5.1080

## Tritanomaly

47.8832, 36.7053, 14.9170

# Monochromacy



## Original Color

45.7857, 37.0859, 5.1606

## Achromatopsia

31.1553, 32.7778, 35.6950

## Achromatomaly

33.7397, 33.0592, 17.6995

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 45.7857, 37.0859, 5.1606 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(242, 138, 14)` looks like.

```
.text, #text, p{  
    color:rgb(242, 138, 14)  
}
```

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(242, 138, 14) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(242, 138, 14) }
```

## Border

The CSS property to change the border of an element to XYZ 45.7857, 37.0859, 5.1606 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(242, 138, 14) }
```



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

```
.border{ border-color:rgb(242, 138, 14) }
```

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

Here you see how a box with a 4 pixel `rgb(242, 138, 14)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(242, 138, 14); -webkit-box-  
shadow:4px 4px 4px 4px rgb(242, 138, 14);  
box-shadow:4px 4px 4px 4px rgb(242, 138,  
14) }
```

# Background

The CSS property to change the background color of an element to XYZ 45.7857, 37.0859, 5.1606 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(242, 138, 14) }
```

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

```
.background{ background-color: rgb(242,  
138, 14) }
```

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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