

# Converting Colors

XYZ(47.0365, 40.5091, 5.3399)

Have a look what the booklet for  
XYZ(47.0365, 40.5091, 5.3399)  
contains.

<b>XYZ(46.8415, 40.3380, 5.3172)</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(46.8415, 40.3380,  
5.3172)**

# Conversions

## Conversions Part 1

Format	Color
Hex	F09600
RGB	240, 150, 0
RGB Percent	94%, 59%, 0%
CMY	0.0588, 0.4117, 0.9999
CMYK	0.00, 0.37, 1.00, 0.06
HSL	38°, 100%, 47%
HSV	38°, 100%, 94%
XYZ	46.8415, 40.3380, 5.3172
YIQ	159.8100, 101.7900, -27.5700

# Conversions

## Conversions Part 2

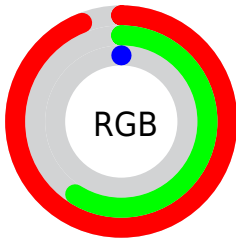
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	144, 240, 0
Decimal	15767040
CIE <sub>Lab</sub>	69.71, 25.50, 74.67
CIE <sub>LCh</sub>	70, 78.907, 71.142
Yxy	40.3380, 0.5064, 0.4361
Android (android.graphics.Color)	4293957120 (0xFFFF09600)
YUV	159.8100, -78.7863, 70.3266
Hunter-Lab	63.5122, 20.5009, 39.4948

# Details

The XYZ color **46.8415, 40.3380, 5.3172** is a dark color, and the websafe version is hex **FF9900**. The color can be described as middle saturated orange. A complement of this color would be **19.3848, 13.6044, 84.0415**, and the grayscale version is **33.6465, 35.3988, 38.5493**.

A 20% lighter version of the original color is **64.1374, 64.9675, 15.9971**, and **22.5933, 18.2708, 2.3358** is the 20% darker color. If you saturate the color by 10%, you get **46.8415, 40.3385, 5.3173**, and if you desaturate by 10%, it is **48.4991, 43.3897, 6.6837**.

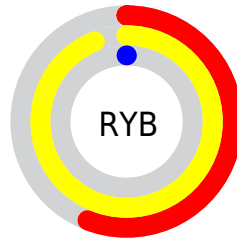
# Distribution



Red (94%)

Green (59%)

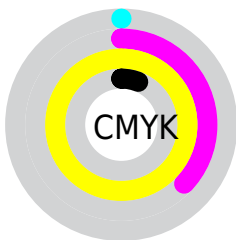
Blue (0%)



Red (56%)

Yellow (94%)

Blue (0%)

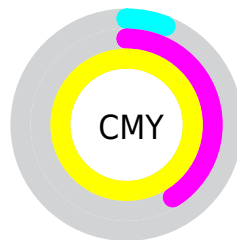


Cyan (0%)

Magenta (37%)

Yellow (100%)

Black (6%)



Cyan (6%)

Magenta (41%)


Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 46.8415, 40.3380, 5.3172 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 46.8415, 40.3380, 5.3172 by changing the saturation by 10% instead.





 46.8415, 40.3380,  
5.3172


 46.8415, 40.3380,  
5.3172


364.8410,  
347.5461, 161.9011


 33.1178, 27.8022,  
2.3726


 84.6972, 75.6779,  
16.9488

 22.3764, 18.1766,  
0.7715


 109.5598, 99.2508,  
26.4729


 14.2519, 11.0768,  
0.0000


 138.8662,  
127.2715, 39.0272

 8.3789, 6.1185,  
0.0000

 172.9816,  
160.1245, 55.0303

 4.3922, 2.9173,  
0.0000

 212.2715,  
198.1940, 74.9007


 1.9263, 1.0887,  
0.0000

 257.1011,


 0.5921, 0.0000,


241.8645, 99.0569


0.0000


 307.8358,  
291.5204, 127.9175


 0.0000, 0.0000,  
0.0000


 46.8415, 40.3380,  
5.3172


 46.8415, 40.3380,  
5.3172


 46.8415, 40.3385,  
5.3173

 48.4991, 43.3897,  
6.6837

 50.4724, 46.7463,  
9.1605

 52.8283, 50.4399,  
13.0846

 55.6069, 54.4901,  
18.6563

 58.8421, 58.9142,  
26.0436

■ 62.5639, 63.7273,  
35.3937

■ 66.7993, 68.9437,  
46.8386

■ 71.5731, 74.5764,  
60.4987

■ 76.9082, 80.6378,  
76.4852

# Harmonies

## Analogous

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



59.9763, 40.3380, 11.9890



46.8415, 40.3380, 5.3172



33.7860, 40.3380, 4.7398

# Triad

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



46.8415, 40.3380, 5.3172



18.9346, 40.3380, 58.9683



56.8810, 40.3380, 121.0688

# Complementary

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



46.8415, 40.3380, 5.3172



19.3848, 13.6044, 84.0415

# 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.



43.2860, 40.3380, 155.4345



46.8415, 40.3380, 5.3172



22.6555, 40.3380, 108.3781

# Square

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



46.8415, 40.3380, 5.3172



19.4743, 40.3380, 24.8790



30.9350, 40.3380, 149.8129



66.6038, 40.3380, 70.8134



# Rectangle

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



46.8415, 40.3380, 5.3172



26.9868, 40.3380, 7.0312



30.9350, 40.3380, 149.8129



52.5001, 40.3380, 135.8530

# Sweetspot

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



46.8424, 40.3401, 5.3179



76.6079, 79.0578, 53.6052



37.8671, 19.2982, 11.8561



15.9419, 16.3678, 10.2221



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.



46.8424, 40.3401, 5.3179



53.7033, 46.1865, 6.0844



58.3114, 76.3167, 11.6576



16.5959, 17.4050, 16.6345



25.7740, 22.3461, 2.9548



2.2394, 2.0494, 0.2776



# Inverse Universe

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



19.3848, 13.6044, 84.0415



22.1985, 15.5169, 96.4328



16.2074, 6.5385, 82.8451



15.3829, 16.1999, 20.0377



10.7286, 7.6815, 46.0451



0.9851, 0.8242, 3.8614



# Previews

## White Background



This preview shows how the XYZ color 46.8415, 40.3380, 5.3172 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 46.8415, 40.3380, 5.3172 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 46.8415, 40.3380, 5.3172**

## **Background**



This preview shows how black text looks on a background with the XYZ color 46.8415, 40.3380, 5.3172.



This preview shows how white text looks on a background with the XYZ color 46.8415, 40.3380,



# 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

46.8415, 40.3380, 5.3172

### Protanopia

36.6564, 40.5037, 6.4163

### Deuteranopia

41.2392, 40.4396, 5.6321



## Tritanopia

52.7437, 40.2601, 33.8452

# Trichromacy



## Original Color

46.8415, 40.3380, 5.3172

## Protanomaly

39.7359, 39.9202, 5.9277

## Deuteranomaly

43.2782, 40.4613, 5.5288

## Tritanomaly

49.1962, 39.7042, 15.8972

# Monochromacy



## Original Color

46.8415, 40.3380, 5.3172

## Achromatopsia

33.4132, 35.1533, 38.2819

## Achromatomaly

35.2730, 35.5551, 17.5741

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 46.8415, 40.3380, 5.3172 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(240, 150, 0)` looks like.

```
.text, #text, p{  
    color:rgb(240, 150, 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(240, 150, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(240, 150, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 46.8415, 40.3380, 5.3172 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(240, 150, 0) }
```



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

```
.border{ border-color:rgb(240, 150, 0) }
```

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

Here you see how a box with a 4 pixel rgb(240, 150, 0) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(240, 150, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(240, 150, 0);  
box-shadow:4px 4px 4px 4px rgb(240, 150,  
0) }
```

# Background

The CSS property to change the background color of an element to XYZ 46.8415, 40.3380, 5.3172 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(240, 150, 0) }
```

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

```
.background{ background-color: rgb(240,  
150, 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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