

# Converting Colors

XYZ(33.8219, 38.9144, 12.8276)

Have a look what the booklet for  
XYZ(33.8219, 38.9144, 12.8276)  
contains.

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# Color

**XYZ(33.8070, 38.8917,  
12.7462)**

# Conversions

## Conversions Part 1

Format	Color
Hex	B0AB4D
RGB	176, 171, 77
RGB Percent	69%, 67%, 30%
CMY	0.3098, 0.3294, 0.6980
CMYK	0.00, 0.03, 0.56, 0.31
HSL	57°, 39%, 50%
HSV	57°, 56%, 69%
XYZ	33.8070, 38.8917, 12.7462
YIQ	161.7790, 33.1540, -28.1740

# Conversions

## Conversions Part 2

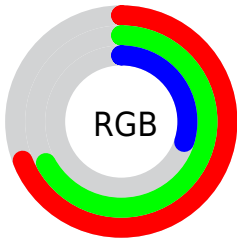
Format	Color
<a href="#">RYB</a>	<a href="#">82, 176, 77</a>
Decimal	<a href="#">11578189</a>
CIELab	<a href="#">68.67, -10.71, 48.15</a>
CIELCh	<a href="#">69, 49.326, 102.535</a>
Yxy	<a href="#">38.8917, 0.3957, 0.4552</a>
Android (android.graphics.Color)	<a href="#">4289768269 (0xFFB0AB4D)</a>
YUV	<a href="#">161.7790, -41.7960, 12.4718</a>
Hunter-Lab	<a href="#">62.3632, -12.3710, 31.5362</a>

# Details

The XYZ color **33.8070, 38.8917, 12.7462** is a dark color, and the websafe version is hex **999933**. A complement of this color would be **13.9144, 10.7468, 42.4153**, and the grayscale version is **34.4186, 36.2110, 39.4338**.

A 20% lighter version of the original color is **65.0905, 73.4701, 31.5194**, and **14.6469, 17.3245, 3.4362** is the 20% darker color. If you saturate the color by 10%, you get **33.1010, 38.3432, 9.8490**, and if you desaturate by 10%, it is **34.6841, 39.5133, 16.5308**.

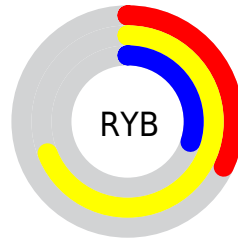
# Distribution



Red (69%)

Green (67%)

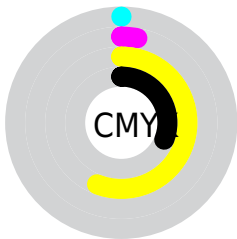
Blue (30%)



Red (32%)

Yellow (69%)

Blue (30%)

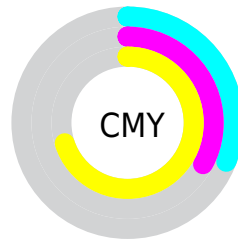


Cyan (0%)

Magenta (3%)

Yellow (56%)

Black (31%)



Cyan (31%)

Magenta (33%)

Yellow (70%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 33.8070, 38.8917, 12.7462 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 33.8070, 38.8917, 12.7462 by changing the saturation by 10% instead.



33.8070, 38.8917,  
12.7462

33.8070, 38.8917,  
12.7462

310.8717,  
341.4298, 220.4350

22.9076, 26.6755,  
7.1253

64.9797, 73.4728,  
31.5315

14.6456, 17.3297,  
3.4610

85.9837, 96.6066,  
45.5331

8.6557, 10.4698,  
1.3346

111.0866,  
124.1482, 63.1653

4.5726, 5.7115,  
0.0899

140.6537,  
156.4823, 84.8467

2.0309, 2.6705,  
0.0000

175.0504,  
193.9931, 110.9958

0.6512, 0.9622,  
0.0000

214.6421,

0.0000, 0.0000,

237.0650, 142.0312

0.0000

259.7940,  
286.0824, 178.3715

■ 33.8070, 38.8917,  
12.7462

■ 33.8070, 38.8917,  
12.7462

■ 33.1010, 38.3432,  
9.8490

■ 34.6841, 39.5133,  
16.5308

■ 32.5494, 37.8568,  
7.7636

■ 35.7420, 40.2076,  
21.2655

■ 32.1370, 37.4279,  
6.4058

■ 36.9927, 40.9808,  
27.0101

■ 31.8424, 37.0479,  
5.6623

■ 38.4465, 41.8371,  
33.8187

■ 31.7450, 36.9111,  
5.4514

■ 40.1130, 42.7803,  
41.7418

■ 42.0012, 43.8140,  
50.8265

■ 44.1194, 44.9415,  
61.1171

■ 46.4758, 46.1661,  
72.6558

■ 49.0778, 47.4908,  
85.4826

# Harmonies

## Analogous

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



41.6485, 38.8917, 13.1802



33.8070, 38.8917, 12.7462



27.7306, 38.8917, 17.9385

# Triad

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



33.8070, 38.8917, 12.7462



26.9847, 38.8917, 78.4978



53.1846, 38.8917, 56.5795

# Complementary

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



33.8070, 38.8917, 12.7462



13.9144, 10.7468, 42.4153

# 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.



48.0517, 38.8917, 82.5039



33.8070, 38.8917, 12.7462



32.6472, 38.8917, 97.9062

# Square

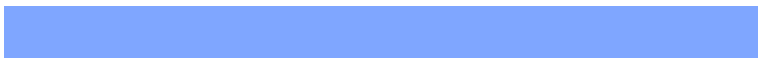
The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



33.8070, 38.8917, 12.7462



24.1802, 38.8917, 52.3623



40.3146, 38.8917, 99.5866



53.6110, 38.8917, 33.6969



# Rectangle

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



33.8070, 38.8917, 12.7462



25.1978, 38.8917, 25.4743



40.3146, 38.8917, 99.5866



51.9225, 38.8917, 65.3885

# Sweetspot

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



33.8079, 38.8935, 12.7470



69.4349, 75.7086, 59.9472



22.1433, 15.1721, 10.0675



14.9318, 16.3399, 12.4464



84.5950, 89.0005, 96.9216



16.2198, 17.0645, 18.5832



# Same Dimension

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



33.8079, 38.8935, 12.7470



59.8207, 69.3635, 17.0249



26.5538, 36.5813, 12.6830



9.1596, 9.8317, 9.0675



23.3050, 27.1086, 4.0042



0.7444, 0.8752, 0.1297



# Inverse Universe

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



13.9144, 10.7468, 42.4153



20.3035, 13.4732, 76.0258



18.2226, 12.4287, 42.5129



8.0752, 8.2967, 10.6821



5.8336, 2.4675, 30.3058



0.1949, 0.1003, 0.9573



# Previews

## White Background



This preview shows how the XYZ color 33.8070, 38.8917, 12.7462 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 33.8070, 38.8917, 12.7462 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 33.8070, 38.8917, 12.7462**

## **Background**



This preview shows how black text looks on a background with the XYZ color 33.8070, 38.8917, 12.7462.



This preview shows how white text looks on a background with the XYZ color 33.8070, 38.8917,



# 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

33.8070, 38.8917, 12.7462

### Protanopia

35.5568, 38.9662, 12.4847

### Deuteranopia

39.5782, 38.6409, 12.9618



## Tritanopia

40.2953, 38.8212, 44.9046

# Trichromacy



## Original Color

33.8070, 38.8917, 12.7462

## Protanomaly

34.7839, 38.8428, 12.5016

## Deuteranomaly

37.2734, 38.4947, 12.8628

## Tritanomaly

37.3340, 38.6903, 29.5450

# Monochromacy



## Original Color

33.8070, 38.8917, 12.7462

## Achromatopsia

34.3422, 36.1307, 39.3463

## Achromatomaly

33.4882, 36.7645, 26.8040

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 33.8070, 38.8917, 12.7462 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(176, 171, 77)` looks like.

```
.text, #text, p{  
    color:rgb(176, 171, 77)  
}
```

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(176, 171, 77) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(176, 171, 77) }
```

## Border

The CSS property to change the border of an element to XYZ 33.8070, 38.8917, 12.7462 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(176, 171, 77) }
```



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

```
.border{ border-color:rgb(176, 171, 77) }
```

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

Here you see how a box with a 4 pixel rgb(176, 171, 77) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(176, 171, 77); -webkit-box-  
shadow:4px 4px 4px 4px rgb(176, 171, 77);  
box-shadow:4px 4px 4px 4px rgb(176, 171,  
77) }
```

# Background

The CSS property to change the background color of an element to XYZ 33.8070, 38.8917, 12.7462 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(176, 171, 77) }
```

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

```
.background{ background-color: rgb(176,  
171, 77) }
```

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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