

# Converting Colors

XYZ(33.6038, 17.5427, 2.0210)

Have a look what the booklet for  
XYZ(33.6038, 17.5427, 2.0210)  
contains.

<b>XYZ(33.5150, 17.5016, 2.0272)</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> .....	30

# Color

**XYZ(33.5150, 17.5016,  
2.0272)**

# Conversions

## Conversions Part 1

Format	Color
Hex	E80E0E
RGB	232, 14, 14
RGB Percent	91%, 5%, 5%
CMY	0.0902, 0.9449, 0.9451
CMYK	0.00, 0.94, 0.94, 0.09
HSL	0°, 89%, 48%
HSV	0°, 94%, 91%
XYZ	33.5150, 17.5016, 2.0272
YIQ	79.1820, 129.9280, 46.2160

# Conversions

## Conversions Part 2

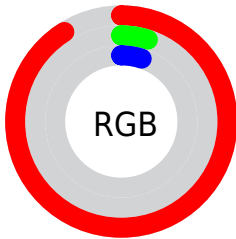
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	232, 14, 14
Decimal	15207950
CIE <sub>Lab</sub>	48.89, 73.56, 58.86
CIE <sub>LCh</sub>	49, 94.213, 38.668
Yxy	17.5016, 0.6318, 0.3299
Android (android.graphics.Color)	4293398030 (0xFFE80E0E)
YUV	79.1820, -32.1347, 134.0214
Hunter-Lab	41.8349, 69.7897, 26.4114

# Details

The XYZ color **33.5150, 17.5016, 2.0272** is a dark color, and the websafe version is hex **CC0000**. The color can be described as dark washed red. A complement of this color would be **43.5898, 63.6062, 86.3230**, and the grayscale version is **7.5141, 7.9054, 8.6090**.

A 20% lighter version of the original color is **46.2863, 29.8261, 8.3185**, and **15.7259, 8.1070, 0.7360** is the 20% darker color. If you saturate the color by 10%, you get **33.2789, 17.1567, 1.5576**, and if you desaturate by 10%, it is **34.2847, 18.6288, 3.5556**.

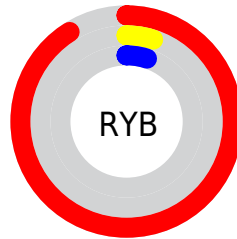
# Distribution



Red (91%)

Green (5%)

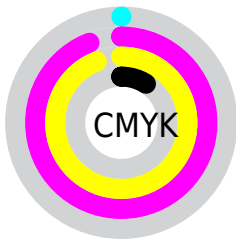
Blue (5%)



Red (91%)

Yellow (5%)

Blue (5%)

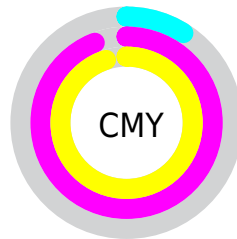


Cyan (0%)

Magenta (94%)

Yellow (94%)

Black (9%)



Cyan (9%)

Magenta (94%)


Yellow (95%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 33.5150, 17.5016, 2.0272 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 33.5150, 17.5016, 2.0272 by changing the saturation by 10% instead.





 33.5150, 17.5016,  
2.0272


 33.5150, 17.5016,  
2.0272

309.5881,  
238.0466, 122.7977


 22.6824, 10.5928,  
0.5719


 64.5281, 39.1862,  
9.1150


 14.4786, 5.7937,  
0.0000


 85.4392, 54.7308,  
15.6355


 8.5382, 2.7201,  
0.0000


 110.4406, 73.9227,  
24.6983

 4.4959, 0.9874,  
0.0000

 139.8975, 97.1464,  
36.7221

 1.9863, 0.0000,  
0.0000

 174.1754,  
124.7862, 52.1255


 0.6263, 0.0000,  
0.0000


 213.6395,


 0.0000, 0.0000,


157.2266, 71.3268


0.0000


 258.6553,  
194.8519, 94.7447


 33.5150, 17.5016,  
2.0272


 33.5150, 17.5016,  
2.0272


 33.2789, 17.1567,  
1.5576

 34.2847, 18.6288,  
3.5556

 35.7436, 20.7639,  
6.4548

 38.0050, 24.0733,  
10.9494

 41.1616, 28.6925,  
17.2239

 45.2934, 34.7387,  
25.4376

■ 50.4717, 42.3161,  
35.7318

■ 56.7610, 51.5190,  
48.2352

■ 64.2207, 62.4343,  
63.0656

■ 72.9059, 75.1427,  
80.3328

# Harmonies

## Analogous

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



39.4019, 17.5016, 12.6826



33.5150, 17.5016, 2.0272



23.5300, 17.5016, 0.0000

# Triad

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



33.5150, 17.5016, 2.0272



5.3754, 17.5016, 6.3600



19.2989, 17.5016, 117.2703

# Complementary

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



33.5150, 17.5016, 2.0272



43.5898, 63.6062, 86.3230

# 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.



11.2382, 17.5016, 108.2798



33.5150, 17.5016, 2.0272



4.9360, 17.5016, 27.2715

# Square

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



33.5150, 17.5016, 2.0272



8.1870, 17.5016, 0.7499



6.6588, 17.5016, 67.7406



29.5038, 17.5016, 86.7807



# Rectangle

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



33.5150, 17.5016, 2.0272



17.0287, 17.5016, 0.0000



6.6588, 17.5016, 67.7406



16.2469, 17.5016, 119.0823

# Sweetspot

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



33.5154, 17.5027, 2.0274



66.9105, 58.8252, 52.9557



48.0008, 23.2959, 78.3099



13.6159, 11.5583, 9.9317



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.



33.5154, 17.5027, 2.0274



41.2406, 21.2612, 1.9302



40.4407, 31.3534, 4.3359



14.3773, 14.3685, 14.9201



18.4755, 9.5251, 0.8648



1.3654, 0.7040, 0.0639



# Inverse Universe

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



43.5898, 63.6062, 86.3230



53.7928, 78.7056, 106.9643



21.8295, 20.0855, 79.0696



14.8072, 16.3359, 18.5170



24.0987, 35.2595, 47.9188



1.7809, 2.6057, 3.5411



# Previews

## White Background



This preview shows how the XYZ color 33.5150, 17.5016, 2.0272 looks on a white 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 × Fail



# Black Background



This preview shows how the XYZ color 33.5150, 17.5016, 2.0272 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 × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

**XYZ 33.5150, 17.5016, 2.0272**

## **Background**



This preview shows how black text looks on a background with the XYZ color 33.5150, 17.5016, 2.0272.



This preview shows how white text looks on a background with the XYZ color 33.5150, 17.5016,



# 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

33.5150, 17.5016, 2.0272

### Protanopia

16.2975, 17.9837, 4.2023

### Deuteranopia

18.0069, 17.8842, 2.5029

# Trichromacy



## Original Color

33.5150, 17.5016, 2.0272

## Protanomaly

19.2149, 14.1413, 2.7537

## Deuteranomaly

21.2022, 14.7635, 1.8757

# Monochromacy



## Original Color

33.5150, 17.5016, 2.0272

## Achromatopsia

7.4317, 7.8187, 8.5146

## Achromatomaly

12.0475, 8.1591, 4.5543

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 33.5150, 17.5016, 2.0272 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(232, 14, 14)` looks like.

```
.text, #text, p{  
    color:rgb(232, 14, 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(232, 14, 14) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(232, 14, 14) }
```

## Border

The CSS property to change the border of an element to XYZ 33.5150, 17.5016, 2.0272 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(232, 14, 14) }
```

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

```
.border{ border-color:rgb(232, 14, 14) }
```

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

Here you see how a box with a 4 pixel rgb(232, 14, 14) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(232, 14, 14); -webkit-box-  
shadow:4px 4px 4px 4px rgb(232, 14, 14);  
box-shadow:4px 4px 4px 4px rgb(232, 14,  
14) }
```



# Background

The CSS property to change the background color of an element to XYZ 33.5150, 17.5016, 2.0272 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(232, 14, 14) }
```

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

```
.background{ background-color: rgb(232, 14,  
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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