

# Converting Colors

XYZ(32.4740, 16.7427, 1.5201)

Have a look what the booklet for  
XYZ(32.4740, 16.7427, 1.5201)  
contains.

<b>XYZ(32.3131, 16.6580, 1.5122)</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(32.3131, 16.6580,  
1.5122)**

# Conversions

## Conversions Part 1

Format	Color
Hex	E50000
RGB	229, 0, 0
RGB Percent	90%, 0%, 0%
CMY	0.1020, 0.9998, 1.0000
CMYK	0.00, 1.00, 1.00, 0.10
HSL	0°, 100%, 45%
HSV	0°, 100%, 90%
XYZ	32.3131, 16.6580, 1.5122
YIQ	68.4710, 136.4840, 48.5480

# Conversions

## Conversions Part 2

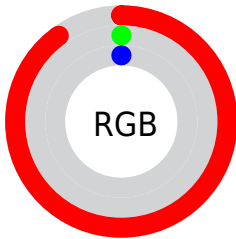
<b>Format</b>	<b>Color</b>
<b>RYB</b>	229, 0, 0
Decimal	15007744
CIELab	47.83, 73.85, 61.97
CIELCh	48, 96.409, 40.000
Yxy	16.6580, 0.6401, 0.3300
Android (android.graphics.Color)	4293197824 (0xFFE50000)
YUV	68.4710, -33.7562, 140.7839
Hunter-Lab	40.8142, 69.8957, 26.3732

# Details

The XYZ color **32.3131, 16.6580, 1.5122** 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 **42.1466, 61.6649, 83.8093**, and the grayscale version is **5.6129, 5.9052, 6.4307**.

A 20% lighter version of the original color is **45.6707, 29.0180, 6.8084**, and **15.1043, 7.7865, 0.7069** is the 20% darker color. If you saturate the color by 10%, you get **32.3134, 16.6591, 1.5124**, and if you desaturate by 10%, it is **32.7719, 17.3301, 2.4231**.

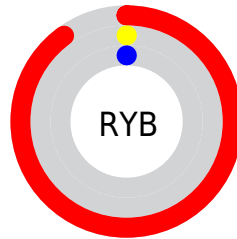
# Distribution



Red (90%)

Green (0%)

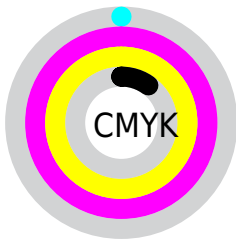
Blue (0%)



Red (90%)

Yellow (0%)

Blue (0%)

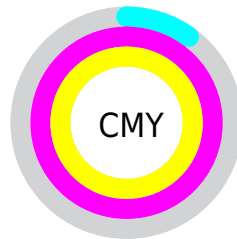


Cyan (0%)

Magenta (100%)

Yellow (100%)

Black (10%)



Cyan (10%)

Magenta (100%)


Yellow (100%)


# Brightness & Saturation Gradients


These gradients show how the XYZ color 32.3131, 16.6580, 1.5122 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 32.3131, 16.6580, 1.5122 by changing the saturation by 10% instead.




 32.3131, 16.6580,  
1.5122


 32.3131, 16.6580,  
1.5122


 304.2631,  
233.1938, 114.2722

 21.7575, 9.9910,  
0.2270


 62.6635, 37.7368,  
7.6583


 13.7944, 5.3930,  
0.0000


 83.1890, 52.9174,  
13.5282

 8.0586, 2.4796,  
0.0000


 107.7684, 71.7046,  
21.8208

 4.1846, 0.8664,  
0.0000

 136.7672, 94.4828,  
32.9546

 1.8071, 0.0000,  
0.0000

 170.5508,  
121.6364, 47.3481


 0.5219, 0.0000,  
0.0000


 209.4843,


 0.0000, 0.0000,


153.5499, 65.4198


0.0000


 253.9333,  
190.6075, 87.5884


 32.3131, 16.6580,  
1.5122


 32.3131, 16.6580,  
1.5122


 32.3134, 16.6591,  
1.5124

 32.7719, 17.3301,  
2.4231

 33.7730, 18.7954,  
4.4120

 35.4898, 21.3080,  
7.8238

 38.0226, 25.0144,  
12.8580

 41.4556, 30.0381,  
19.6821

■ 45.8626, 36.4869,  
28.4429

■ 51.3099, 44.4578,  
39.2721

■ 57.8578, 54.0390,  
52.2898

■ 65.5621, 65.3121,  
67.6068

# Harmonies

## Analogous

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



38.5332, 16.6580, 11.0551



32.3131, 16.6580, 1.5122



22.2354, 16.6580, 0.0000

# Triad

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



32.3131, 16.6580, 1.5122



4.7769, 16.6580, 6.2310



18.9029, 16.6580, 117.2370

# Complementary

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



32.3131, 16.6580, 1.5122



42.1466, 61.6649, 83.8093

# 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.



10.7951, 16.6580, 109.9319



32.3131, 16.6580, 1.5122



4.4470, 16.6580, 27.7391

# Square

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



32.3131, 16.6580, 1.5122



7.3627, 16.6580, 0.6016



6.1987, 16.6580, 69.2750



29.1234, 16.6580, 84.6456



# Rectangle

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



32.3131, 16.6580, 1.5122



15.8329, 16.6580, 0.0000



6.1987, 16.6580, 69.2750



15.8330, 16.6580, 119.7681

# Sweetspot

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



32.3134, 16.6591, 1.5124



65.3499, 56.5419, 49.8525



46.4556, 22.3150, 75.9869



13.3229, 11.1297, 9.3491



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.



32.3134, 16.6591, 1.5124



41.2407, 21.2613, 1.9302



38.3867, 28.8055, 3.5368



14.3773, 14.3686, 14.9201



18.4755, 9.5252, 0.8648



1.3654, 0.7041, 0.0639



# Inverse Universe

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



42.1466, 61.6649, 83.8093



53.7905, 78.7010, 106.9635



20.2166, 17.8048, 76.4993



14.8072, 16.3358, 18.5170



24.0977, 35.2575, 47.9185



1.7808, 2.6056, 3.5410



# Previews

## White Background



This preview shows how the XYZ color 32.3131, 16.6580, 1.5122 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 32.3131, 16.6580, 1.5122 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

**XYZ 32.3131, 16.6580, 1.5122**

## **Background**



This preview shows how black text looks on a background with the XYZ color 32.3131, 16.6580, 1.5122.



This preview shows how white text looks on a background with the XYZ color 32.3131, 16.6580,



# 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

32.3131, 16.6580, 1.5122

### Protanopia

15.6857, 17.3303, 3.7467

### Deuteranopia

17.4300, 17.2629, 2.4134

# Trichromacy



## Original Color

32.3131, 16.6580, 1.5122

## Protanomaly

18.2922, 13.0516, 2.1712

## Deuteranomaly

20.0947, 13.6104, 1.5680

# Monochromacy



## Original Color

32.3131, 16.6580, 1.5122

## Achromatopsia

5.6565, 5.9511, 6.4808

## Achromatomaly

10.1077, 6.4952, 3.1038

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 32.3131, 16.6580, 1.5122 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(229, 0, 0)` looks like.

```
.text, #text, p{  
    color:rgb(229, 0, 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(229, 0, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(229, 0, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 32.3131, 16.6580, 1.5122 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(229, 0, 0) }
```

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

```
.border{ border-color:rgb(229, 0, 0) }
```

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

Here you see how a box with a 4 pixel `rgb(229, 0, 0)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(229, 0, 0); -webkit-box-shadow:4px  
4px 4px 4px rgb(229, 0, 0); box-shadow:4px  
4px 4px 4px rgb(229, 0, 0) }
```



# Background

The CSS property to change the background color of an element to XYZ 32.3131, 16.6580, 1.5122 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(229, 0, 0) }
```

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

```
.background{ background-color: rgb(229, 0,  
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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