

# Converting Colors

XYZ(31.3579, 16.8815, 3.0409)

Have a look what the booklet for  
XYZ(31.3579, 16.8815, 3.0409)  
contains.

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# Color

**XYZ(31.2225, 16.8308,  
3.0419)**

# Conversions

## Conversions Part 1

Format	Color
Hex	DF2021
RGB	223, 32, 33
RGB Percent	87%, 13%, 13%
CMY	0.1255, 0.8744, 0.8706
CMYK	0.00, 0.86, 0.85, 0.13
HSL	360°, 75%, 50%
HSV	360°, 86%, 87%
XYZ	31.2225, 16.8308, 3.0419
YIQ	89.2230, 113.5150, 40.8030

# Conversions

## Conversions Part 2

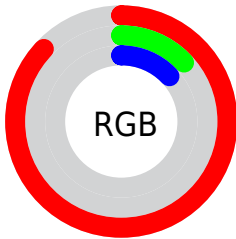
<b>Format</b>	<b>Color</b>
<a href="#">RYB</a>	<a href="#">223, 32, 33</a>
Decimal	<a href="#">14622753</a>
CIELab	<a href="#">48.05, 68.93, 49.74</a>
CIELCh	<a href="#">48, 85.005, 35.811</a>
Yxy	<a href="#">16.8308, 0.6111, 0.3294</a>
Android (android.graphics.Color)	<a href="#">4292812833 (0xFFDF2021)</a>
YUV	<a href="#">89.2230, -27.7179, 117.3224</a>
Hunter-Lab	<a href="#">41.0254, 64.0537, 24.3216</a>

# Details

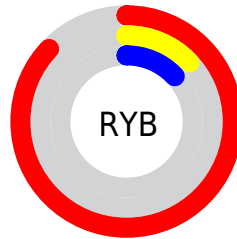
The XYZ color **31.2225, 16.8308, 3.0419** is a dark color, and the websafe version is hex **CC0000**. The color can be described as dark washed red. A complement of this color would be **40.1713, 58.3575, 78.2681**, and the grayscale version is **9.5891, 10.0884, 10.9863**.

A 20% lighter version of the original color is **47.2451, 30.9535, 11.0740**, and **14.1006, 7.2691, 0.6599** is the 20% darker color. If you saturate the color by 10%, you get **30.5961, 15.9227, 1.7718**, and if you desaturate by 10%, it is **32.4595, 18.6338, 5.5238**.

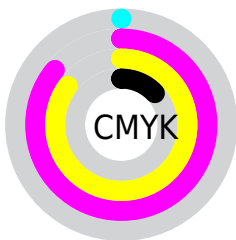
# Distribution



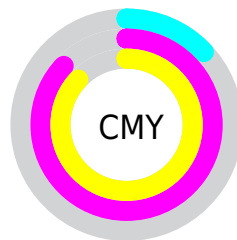
- Red (87%)
- Green (13%)
- Blue (13%)



- Red (87%)
- Yellow (13%)
- Blue (13%)



- Cyan (0%)
- Magenta (86%)
- Yellow (85%)
- Black (13%)




- Cyan (13%)
- Magenta (87%)
- Yellow (87%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 31.2225, 16.8308, 3.0419 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 31.2225, 16.8308, 3.0419 by changing the saturation by 10% instead.




 31.2225, 16.8308,  
3.0419


 31.2225, 16.8308,  
3.0419


299.3707,  
234.1954, 136.8925


 20.9210, 10.1139,  
1.1161


 60.9637, 38.0346,  
11.7317


 13.1784, 5.4746,  
0.0000


 81.1340, 53.2904,  
19.3327

 7.6294, 2.5283,  
0.0000


 105.3247, 72.1612,  
29.6625

 3.9085, 0.8908,  
0.0000

 133.9011, 95.0315,  
43.1396

 1.6505, 0.0000,  
0.0000

 167.2286,  
122.2857, 60.1827


 0.4250, 0.0000,  
0.0000


 205.6724,


 0.0000, 0.0000,


154.3082, 81.2101


0.0000


 249.5980,  
191.4833, 106.6406


 31.2225, 16.8308,  
3.0419


 31.2225, 16.8308,  
3.0419


 30.5961, 15.9227,  
1.7718


 32.4595, 18.6338,  
5.5238

 30.4375, 15.6904,  
1.4572

 34.4114, 21.4838,  
9.4233

 37.1645, 25.5081,  
14.9093

 40.7924, 30.8152,  
22.1269

 45.3607, 37.5010,  
31.2045

■ 50.9283, 45.6526,  
42.2589

■ 57.5497, 55.3497,  
55.3968

■ 65.2753, 66.6664,  
70.7177

■ 74.1521, 79.6720,  
88.3144

# Harmonies

## Analogous

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



35.6623, 16.8308, 14.3659



31.2225, 16.8308, 3.0419



22.8482, 16.8308, 0.3703

# Triad

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



31.2225, 16.8308, 3.0419



5.9489, 16.8308, 5.8795



17.5406, 16.8308, 100.9071

# Complementary

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



31.2225, 16.8308, 3.0419



40.1713, 58.3575, 78.2681

# 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.



10.6740, 16.8308, 90.3872



31.2225, 16.8308, 3.0419



5.3393, 16.8308, 22.9539

# Square

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



31.2225, 16.8308, 3.0419



8.8148, 16.8308, 0.9721



6.7567, 16.8308, 55.9179



26.2952, 16.8308, 78.5303



# Rectangle

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



31.2225, 16.8308, 3.0419



17.1010, 16.8308, 0.0000



6.7567, 16.8308, 55.9179



14.9419, 16.8308, 101.2332

# Sweetspot

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



31.2229, 16.8319, 3.0421



68.5628, 61.2021, 56.3664



43.2960, 21.5489, 71.6891



14.0836, 12.2334, 10.8902



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.



31.2229, 16.8319, 3.0421



41.2472, 21.2629, 1.9677



37.9410, 30.2898, 5.2148



13.7101, 13.7017, 14.2437



17.8981, 9.2263, 0.8634



1.2416, 0.6399, 0.0652



# Inverse Universe

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



31.2229, 16.8319, 3.0421



41.2472, 21.2629, 1.9677



21.9907, 21.7854, 72.8576



13.7101, 13.7017, 14.2437



17.8981, 9.2263, 0.8634



1.2416, 0.6399, 0.0652



# Previews

## White Background



This preview shows how the XYZ color 31.2225, 16.8308, 3.0419 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 31.2225, 16.8308, 3.0419 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 31.2225, 16.8308, 3.0419**

## **Background**



This preview shows how black text looks on a background with the XYZ color 31.2225, 16.8308, 3.0419.



This preview shows how white text looks on a background with the XYZ color 31.2225, 16.8308,



# 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

31.2225, 16.8308, 3.0419

### Protanopia

15.6527, 17.0986, 5.7242

### Deuteranopia

17.1457, 16.9570, 2.3694



## Tritanopia

31.1971, 16.8644, 2.7733

# Trichromacy



## Original Color

31.2225, 16.8308, 3.0419

## Protanomaly

18.8264, 14.4730, 4.2839

## Deuteranomaly

20.2424, 14.7956, 2.1368

## Tritanomaly

31.2096, 16.8694, 2.8395

# Monochromacy



## Original Color

31.2225, 16.8308, 3.0419

## Achromatopsia

9.4954, 9.9899, 10.8790

## Achromatomaly

13.6225, 9.9672, 6.8361

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 31.2225, 16.8308, 3.0419 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(223, 32, 33)` looks like.

```
.text, #text, p{  
    color:rgb(223, 32, 33)  
}
```

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(223, 32, 33) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(223, 32, 33) }
```

## Border

The CSS property to change the border of an element to XYZ 31.2225, 16.8308, 3.0419 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(223, 32, 33) }
```



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

```
.border{ border-color:rgb(223, 32, 33) }
```

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

Here you see how a box with a 4 pixel `rgb(223, 32, 33)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(223, 32, 33); -webkit-box-  
shadow:4px 4px 4px 4px rgb(223, 32, 33);  
box-shadow:4px 4px 4px 4px rgb(223, 32,  
33) }
```

# Background

The CSS property to change the background color of an element to XYZ 31.2225, 16.8308, 3.0419 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(223, 32, 33) }
```

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

```
.background{ background-color: rgb(223, 32,  
33) }
```

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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