

# Converting Colors

XYZ(31.2112, 17.7718, 1.7853)

Have a look what the booklet for  
XYZ(31.2112, 17.7718, 1.7853)  
contains.

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# Color

**XYZ(31.2648, 17.8108,  
1.7900)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	DE3200
RGB	222, 50, 0
RGB Percent	87%, 20%, 0%
CMY	0.1294, 0.8039, 1.0000
CMYK	0.00, 0.77, 1.00, 0.13
HSL	14°, 100%, 44%
HSV	14°, 100%, 87%
XYZ	31.2648, 17.8108, 1.7900
YIQ	95.7280, 118.5620, 20.9140

# Conversions

## Conversions Part 2

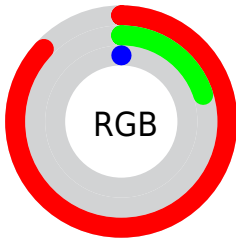
Format	Color
<a href="#">RYB</a>	<a href="#">222, 65, 0</a>
Decimal	<a href="#">14561792</a>
CIELab	<a href="#">49.27, 63.83, 61.67</a>
CIELCh	<a href="#">49, 88.759, 44.014</a>
Yxy	<a href="#">17.8108, 0.6147, 0.3502</a>
Android (android.graphics.Color)	<a href="#">4292751872</a> ( <a href="#">0xFFDE3200</a> )
YUV	<a href="#">95.7280, -47.1939, 110.7405</a>
Hunter-Lab	<a href="#">42.2028, 58.3818, 27.0273</a>

# Details

The XYZ color **31.2648, 17.8108, 1.7900** is a dark color, and the websafe version is hex **CC3300**. The color can be described as dark washed red. A complement of this color would be **27.9348, 34.7741, 74.3464**, and the grayscale version is **11.1444, 11.7248, 12.7683**.

A 20% lighter version of the original color is **47.5797, 32.7173, 7.8103**, and **13.9046, 7.1681, 0.6507** is the 20% darker color. If you saturate the color by 10%, you get **31.2651, 17.8117, 1.7902**, and if you desaturate by 10%, it is **32.2906, 19.6279, 2.8560**.

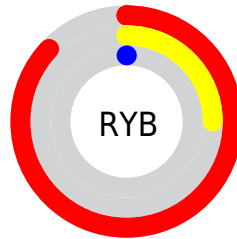
# Distribution



Red (87%)

Green (20%)

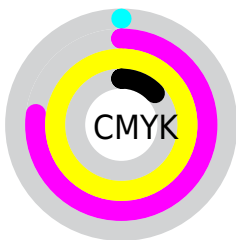
Blue (0%)



Red (87%)

Yellow (25%)

Blue (0%)

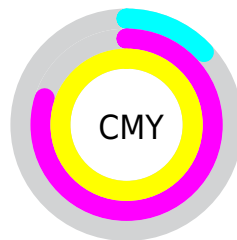


Cyan (0%)

Magenta (77%)

Yellow (100%)

Black (13%)



Cyan (13%)

Magenta (80%)


Yellow (100%)


# Brightness & Saturation Gradients


These gradients show how the XYZ color 31.2648, 17.8108, 1.7900 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 31.2648, 17.8108, 1.7900 by changing the saturation by 10% instead.





 31.2648, 17.8108,  
1.7900


 31.2648, 17.8108,  
1.7900


 299.5615,  
239.8024, 119.0257


 20.9534, 10.8142,  
0.4213


 61.0297, 39.7147,  
8.4583


 13.2022, 5.9421,  
0.0000


 81.2140, 55.3908,  
14.6906


 7.6459, 2.8099,  
0.0000


 105.4199, 74.7288,  
23.4129

 3.9191, 1.0333,  
0.0000

 134.0128, 98.1133,  
35.0440

 1.6565, 0.0000,  
0.0000

 167.3580,  
125.9284, 50.0023


 0.4288, 0.0000,  
0.0000


 205.8210,


 0.0000, 0.0000,


158.5588, 68.7063


0.0000


 249.7671,  
196.3886, 91.5746


 31.2648, 17.8108,  
1.7900


 31.2648, 17.8108,  
1.7900


 31.2651, 17.8117,  
1.7902

 32.2906, 19.6279,  
2.8560

 33.7885, 22.1191,  
4.9113

 35.8383, 25.3563,  
8.2532

 38.4929, 29.3957,  
13.0528

 41.7986, 34.2877,  
19.4547

■ 45.7966, 40.0786,  
27.5857

■ 50.5249, 46.8111,  
37.5601

■ 56.0186, 54.5252,  
49.4821

■ 62.3102, 63.2585,  
63.4482

# Harmonies

## Analogous

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



37.7200, 17.8108, 10.2676



31.2648, 17.8108, 1.7900



21.7361, 17.8108, 0.0000

# Triad

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



31.2648, 17.8108, 1.7900



5.7245, 17.8108, 9.3013



21.1129, 17.8108, 106.6842

# Complementary

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



31.2648, 17.8108, 1.7900



27.9348, 34.7741, 74.3464

# 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.



12.8881, 17.8108, 105.4156



31.2648, 17.8108, 1.7900



5.6555, 17.8108, 32.7636

# Square

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



31.2648, 17.8108, 1.7900



8.0574, 17.8108, 1.5715



7.8220, 17.8108, 71.9476



30.6815, 17.8108, 74.6570



# Rectangle

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



31.2648, 17.8108, 1.7900



15.8315, 17.8108, 0.0000



7.8220, 17.8108, 71.9476



18.0753, 17.8108, 110.6377

# Sweetspot

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



31.2652, 17.8119, 1.7903



69.0062, 63.8545, 51.0713



37.7542, 18.5816, 41.5900



14.1569, 12.7976, 9.6271



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.



31.2652, 17.8119, 1.7903



42.7253, 24.2306, 2.4251



42.5393, 40.3602, 5.5483



13.9565, 14.1989, 14.3119



18.6398, 10.7176, 1.0863



1.3590, 0.8768, 0.0976

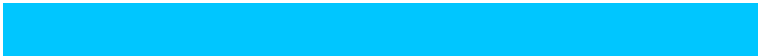


# Inverse Universe

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



27.9348, 34.7741, 74.3464



38.1421, 47.4042, 101.7474



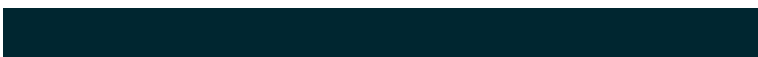
14.9568, 8.8180, 70.0204



13.8410, 15.0211, 17.5576



16.6796, 20.8288, 44.1896



1.2212, 1.5738, 3.0847



# Previews

## White Background



This preview shows how the XYZ color 31.2648, 17.8108, 1.7900 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



## 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 31.2648, 17.8108, 1.7900**

## **Background**



This preview shows how black text looks on a background with the XYZ color 31.2648, 17.8108, 1.7900.



This preview shows how white text looks on a background with the XYZ color 31.2648, 17.8108,



# 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

31.2648, 17.8108, 1.7900

### Protanopia

16.3378, 18.0180, 3.5940

### Deuteranopia

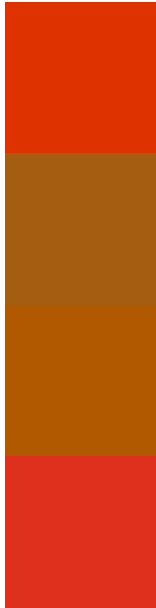
18.1886, 17.9779, 2.5114



## Tritanopia

31.9610, 17.9262, 4.4649

# Trichromacy



## Original Color

31.2648, 17.8108, 1.7900

## Protanomaly

19.5326, 15.8685, 2.5638

## Deuteranomaly

21.4769, 16.3749, 2.0287

## Tritanomaly

31.7227, 17.8956, 3.0105

# Monochromacy



## Original Color

31.2648, 17.8108, 1.7900

## Achromatopsia

11.1181, 11.6971, 12.7381

## Achromatomaly

14.7936, 11.6797, 5.8896

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 31.2648, 17.8108, 1.7900 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(222, 50, 0)` looks like.

```
.text, #text, p{  
    color:rgb(222, 50, 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(222, 50, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(222, 50, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 31.2648, 17.8108, 1.7900 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(222, 50, 0) }
```



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

```
.border{ border-color:rgb(222, 50, 0) }
```

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

Here you see how a box with a 4 pixel rgb(222, 50, 0) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(222, 50, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(222, 50, 0);  
box-shadow:4px 4px 4px 4px rgb(222, 50, 0)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 31.2648, 17.8108, 1.7900 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(222, 50, 0) }
```

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

```
.background{ background-color: rgb(222, 50,  
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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