

# Converting Colors

XYZ(23.8355, 15.6825, 1.7708)

Have a look what the booklet for  
XYZ(23.8355, 15.6825, 1.7708)  
contains.

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# Color

**XYZ(23.8032, 15.7111,  
1.7780)**

# Conversions

## Conversions Part 1

Format	Color
Hex	BF4800
RGB	191, 72, 0
RGB Percent	75%, 28%, 0%
CMY	0.2510, 0.7176, 1.0000
CMYK	0.00, 0.62, 1.00, 0.25
HSL	23°, 100%, 37%
HSV	23°, 100%, 75%
XYZ	23.8032, 15.7111, 1.7780
YIQ	99.3730, 94.0360, 2.8360

# Conversions

## Conversions Part 2

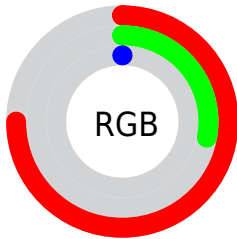
Format	Color
R <sub>Y</sub> B	191, 116, 0
Decimal	12535808
CIE Lab	46.59, 45.37, 57.18
CIE LCh	47, 72.989, 51.572
Yxy	15.7111, 0.5765, 0.3805
Android (android.graphics.Color)	4290725888 (0xFFBF4800)
YUV	99.3730, -48.9909, 80.3569
Hunter-Lab	39.6372, 37.8288, 25.0865

# Details

The XYZ color **23.8032, 15.7111, 1.7780** is a dark color, and the websafe version is hex **CC3300**. A complement of this color would be **16.0002, 16.9541, 51.7189**, and the grayscale version is **12.0582, 12.6861, 13.8152**.

A 20% lighter version of the original color is **49.3373, 36.2327, 8.3962**, and **9.2103, 4.9812, 0.4760** is the 20% darker color. If you saturate the color by 10%, you get **23.8034, 15.7117, 1.7781**, and if you desaturate by 10%, it is **24.7672, 17.4499, 2.6835**.

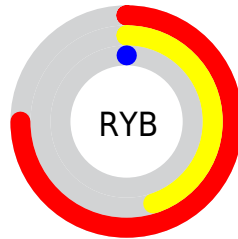
# Distribution



Red (75%)

Green (28%)

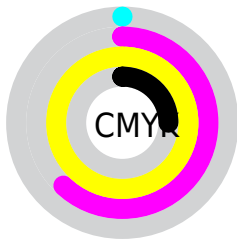
Blue (0%)



Red (75%)

Yellow (45%)

Blue (0%)

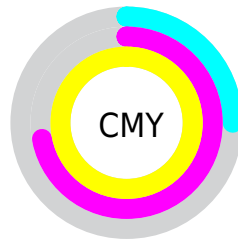


Cyan (0%)

Magenta (62%)

Yellow (100%)

Black (25%)



Cyan (25%)

Magenta (72%)


Yellow (100%)


# Brightness & Saturation Gradients


These gradients show how the XYZ color 23.8032, 15.7111, 1.7780 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 23.8032, 15.7111, 1.7780 by changing the saturation by 10% instead.





 23.8032, 15.7111,  
1.7780


 23.8032, 15.7111,  
1.7780


 264.2830,  
227.6309, 118.8284


 15.3116, 9.3200,  
0.4134


 49.1659, 36.0959,  
8.4245


 9.1261, 4.9505,  
0.0000


 66.7677, 50.8584,  
14.6417

 4.8813, 2.2182,  
0.0000

 88.1370, 69.1801,  
23.3462

 2.2118, 0.7299,  
0.0000

 113.6391, 91.4454,  
34.9567


 0.7490, 0.0000,  
0.0000


 143.6394,  
118.0388, 49.8916


 0.0000, 0.0000,  
0.0000


 178.5033,


149.3445, 68.5695


 218.5960,  
185.7471, 91.4089


 23.8032, 15.7111,  
1.7780


 23.8032, 15.7111,  
1.7780


 23.8034, 15.7117,  
1.7781

 24.7672, 17.4499,  
2.6835

 26.0040, 19.5480,  
4.2536

 27.5634, 22.0379,  
6.7117

 29.4733, 24.9419,  
10.1721

 31.7584, 28.2802,  
14.7316

■ 34.4406, 32.0714,  
20.4755

■ 37.5400, 36.3331,  
27.4803

■ 41.0751, 41.0815,  
35.8165

■ 45.0633, 46.3323,  
45.5489

# Harmonies

## Analogous

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



29.2769, 15.7111, 7.2555



23.8032, 15.7111, 1.7780



16.7807, 15.7111, 0.5685

# Triad

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



23.8032, 15.7111, 1.7780



5.8664, 15.7111, 12.5070



19.8468, 15.7111, 73.9431

# Complementary

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



23.8032, 15.7111, 1.7780



16.0002, 16.9541, 51.7189

# 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.



13.2261, 15.7111, 79.5348



23.8032, 15.7111, 1.7780



6.2600, 15.7111, 33.3046

# Square

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



23.8032, 15.7111, 1.7780



7.3086, 15.7111, 3.3315



8.5958, 15.7111, 61.2486



26.5815, 15.7111, 49.0190



# Rectangle

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



23.8032, 15.7111, 1.7780



12.6313, 15.7111, 0.6172



8.5958, 15.7111, 61.2486



17.4984, 15.7111, 78.6173

# Sweetspot

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



23.8035, 15.7120, 1.7782



66.9528, 64.6898, 48.5663



24.9349, 12.4560, 19.1688



14.1648, 13.4706, 9.4367



92.9021, 97.7402, 106.4391



19.4759, 20.4902, 22.3138



# Same Dimension

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



23.8035, 15.7120, 1.7782



42.4176, 27.7104, 3.1130



35.0372, 38.1793, 5.5228



9.8170, 10.1099, 10.0106



15.7154, 10.4695, 1.1925



0.6790, 0.5370, 0.0679



# Inverse Universe

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



16.0002, 16.9541, 51.7189



28.4148, 29.8815, 92.5492



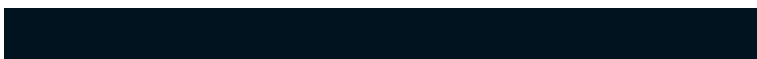
9.7617, 4.4771, 49.6394



9.4981, 10.1886, 12.1382



10.5945, 11.3008, 34.0158



0.4760, 0.5647, 1.3528



# Previews

## White Background



This preview shows how the XYZ color 23.8032, 15.7111, 1.7780 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 23.8032, 15.7111, 1.7780 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 23.8032, 15.7111, 1.7780**

## **Background**



This preview shows how black text looks on a background with the XYZ color 23.8032, 15.7111, 1.7780.



This preview shows how white text looks on a background with the XYZ color 23.8032, 15.7111,



# 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

23.8032, 15.7111, 1.7780

### Protanopia

14.3692, 15.9953, 2.9462

### Deuteranopia

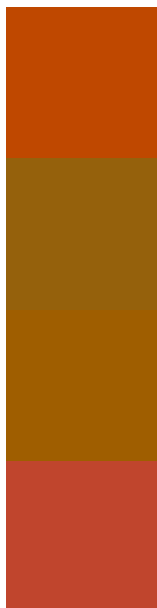
15.9693, 15.8835, 2.2242



## Tritanopia

25.1368, 15.8067, 7.6874

# Trichromacy



## Original Color

23.8032, 15.7111, 1.7780

## Protanomaly

16.7355, 14.9655, 2.3544

## Deuteranomaly

18.3008, 15.3763, 2.0034

## Tritanomaly

24.3400, 15.6522, 4.2209

# Monochromacy



## Original Color

23.8032, 15.7111, 1.7780

## Achromatopsia

11.8596, 12.4772, 13.5877

## Achromatomaly

13.9853, 12.4092, 6.3607

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 23.8032, 15.7111, 1.7780 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(191, 72, 0)` looks like.

```
.text, #text, p{  
    color:rgb(191, 72, 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(191, 72, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(191, 72, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 23.8032, 15.7111, 1.7780 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(191, 72, 0) }
```



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

```
.border{ border-color:rgb(191, 72, 0) }
```

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

Here you see how a box with a 4 pixel `rgb(191, 72, 0)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(191, 72, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(191, 72, 0);  
box-shadow:4px 4px 4px 4px rgb(191, 72, 0)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 23.8032, 15.7111, 1.7780 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(191, 72, 0) }
```

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

```
.background{ background-color: rgb(191, 72,  
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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