

# Converting Colors

XYZ(18.9477, 10.0288, 2.3806)

Have a look what the booklet for  
XYZ(18.9477, 10.0288, 2.3806)  
contains.

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# Color

**XYZ(18.8351, 9.9757,  
2.3716)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	B21121
RGB	178, 17, 33
RGB Percent	70%, 7%, 13%
CMY	0.3020, 0.9332, 0.8706
CMYK	0.00, 0.90, 0.81, 0.30
HSL	354°, 83%, 38%
HSV	354°, 90%, 70%
XYZ	18.8351, 9.9757, 2.3716
YIQ	66.9630, 90.8200, 39.1080

# Conversions

## Conversions Part 2

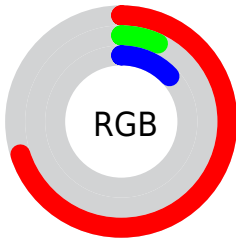
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	178, 17, 33
Decimal	11669793
CIE Lab	37.80, 59.61, 36.90
CIE LCh	38, 70.111, 31.758
Yxy	9.9757, 0.6040, 0.3199
Android (android.graphics.Color)	4289859873 (0xFFB21121)
YUV	66.9630, -16.7438, 97.3794
Hunter-Lab	31.5843, 51.1747, 17.6571

# Details

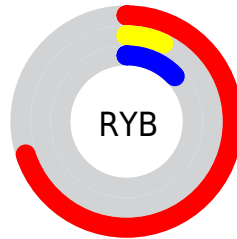
The XYZ color **18.8351, 9.9757, 2.3716** is a dark color, and the websafe version is hex **CC3333**. A complement of this color would be **22.6754, 34.5694, 39.6701**, and the grayscale version is **5.3466, 5.6250, 6.1256**.

A 20% lighter version of the original color is **40.8993, 25.7478, 10.0219**, and **7.2025, 3.7130, 0.3371** is the 20% darker color. If you saturate the color by 10%, you get **18.4665, 9.5075, 1.4199**, and if you desaturate by 10%, it is **19.5109, 10.8786, 3.9809**.

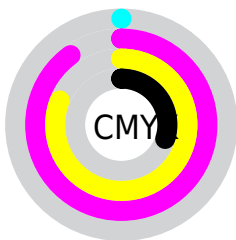
# Distribution



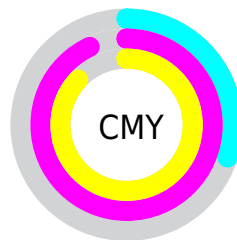
- Red (70%)
- Green (7%)
- Blue (13%)



- Red (70%)
- Yellow (7%)
- Blue (13%)



- Cyan (0%)
- Magenta (90%)
- Yellow (81%)
- Black (30%)



- Cyan (30%)
- Magenta (93%)
- Yellow (87%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 18.8351, 9.9757, 2.3716 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 18.8351, 9.9757, 2.3716 by changing the saturation by 10% instead.



■ 18.8351, 9.9757,  
2.3716

■ 18.8351, 9.9757,  
2.3716

238.4925,  
190.4985, 127.9036

■ 11.6545, 5.3828,  
0.7709

■ 40.9743, 25.7498,  
10.0339

■ 6.5794, 2.4736,  
0.0000

■ 56.6636, 37.6998,  
16.9452

■ 3.2444, 0.8634,  
0.0000

■ 75.9198, 52.8710,  
26.4680

■ 1.2843, 0.0000,  
0.0000

■ 99.1084, 71.6478,  
39.0209

■ 0.1714, 0.0000,  
0.0000


■ 126.5945, 94.4145,  
55.0223


■ 0.0000, 0.0000,  
0.0000


■ 158.7437,


121.5557, 74.8909


 195.9213,  
153.4555, 99.0452


 18.8351, 9.9757,  
2.3716


 18.8351, 9.9757,  
2.3716


 18.4665, 9.5075,  
1.4199

 19.5109, 10.8786,  
3.9809

 20.5720, 12.3593,  
6.3124

 22.0656, 14.4938,  
9.4388

 24.0319, 17.3465,  
13.4234

 26.5063, 20.9736,  
18.3232

■ 29.5211, 25.4260,  
24.1902

■ 33.1057, 30.7502,  
31.0728

■ 37.2874, 36.9892,  
39.0157

■ 42.0917, 44.1833,  
48.0613

# Harmonies

## Analogous

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



20.9372, 9.9757, 10.1235



18.8351, 9.9757, 2.3716



14.1611, 9.9757, 0.2381

# Triad

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



18.8351, 9.9757, 2.3716



3.7440, 9.9757, 2.8786



9.7479, 9.9757, 58.7641

# Complementary

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



18.8351, 9.9757, 2.3716



22.6754, 34.5694, 39.6701

# 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.



5.9665, 9.9757, 50.2156



18.8351, 9.9757, 2.3716



3.2216, 9.9757, 11.6352

# Square

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



18.8351, 9.9757, 2.3716



5.6372, 9.9757, 0.3885



3.8879, 9.9757, 29.6671



14.7667, 9.9757, 48.1474



# Rectangle

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



18.8351, 9.9757, 2.3716



10.7686, 9.9757, 0.0000



3.8879, 9.9757, 29.6671



8.3014, 9.9757, 58.0191

# Sweetspot

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



18.8353, 9.9763, 2.3717



55.3552, 48.8072, 47.3781



23.1170, 11.2870, 43.0795



11.8082, 10.1377, 9.6175



86.6293, 91.1408, 99.2523



17.0014, 17.8868, 19.4787



# Same Dimension

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



18.8353, 9.9763, 2.3717



33.4499, 17.2262, 2.3743



21.4346, 15.4519, 2.3840



8.5295, 8.5185, 9.0208



13.2244, 6.8073, 1.0759



0.4272, 0.2186, 0.0924



# Inverse Universe

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



18.8353, 9.9763, 2.3717



33.4499, 17.2262, 2.3743



14.2407, 15.2803, 44.3181



8.5295, 8.5185, 9.0208



13.2244, 6.8073, 1.0759



0.4272, 0.2186, 0.0924



# Previews

## White Background



This preview shows how the XYZ color 18.8351, 9.9757, 2.3716 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

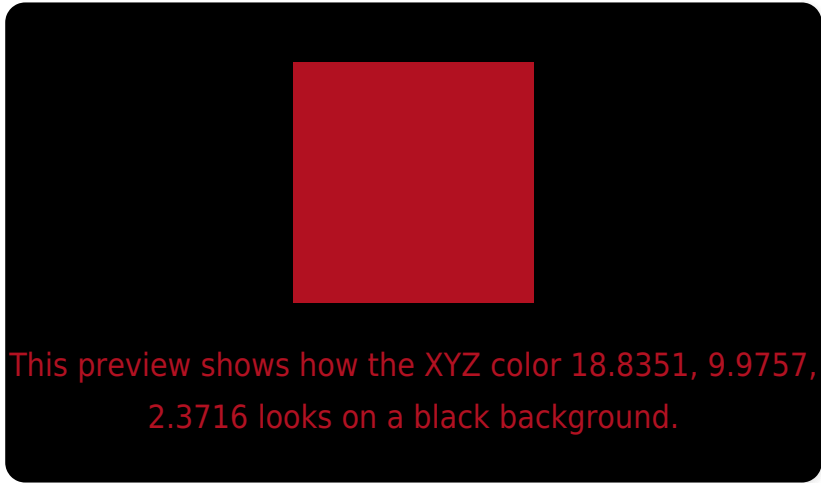
Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass



# 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 18.8351, 9.9757, 2.3716**

## **Background**



This preview shows how black text looks on a background with the XYZ color 18.8351, 9.9757, 2.3716.



This preview shows how white text looks on a background with the XYZ color 18.8351, 9.9757,



# 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

18.8351, 9.9757, 2.3716

### Protanopia

9.5942, 10.4305, 4.6396

### Deuteranopia

10.3764, 10.2767, 2.0090



## Tritanopia

18.7218, 10.0387, 1.4411

# Trichromacy



## Original Color

18.8351, 9.9757, 2.3716

## Protanomaly

11.1901, 8.4378, 3.4218

## Deuteranomaly

12.1399, 8.7177, 1.8535

## Tritanomaly

18.7551, 10.0232, 1.7052

# Monochromacy



## Original Color

18.8351, 9.9757, 2.3716

## Achromatopsia

5.3350, 5.6128, 6.1124

## Achromatomaly

7.8513, 5.5983, 4.2812

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 18.8351, 9.9757, 2.3716 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(178, 17, 33)` looks like.

```
.text, #text, p{  
    color:rgb(178, 17, 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(178, 17, 33) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(178, 17, 33) }
```

## Border

The CSS property to change the border of an element to XYZ 18.8351, 9.9757, 2.3716 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(178, 17, 33) }
```



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

```
.border{ border-color:rgb(178, 17, 33) }
```

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

Here you see how a box with a 4 pixel rgb(178, 17, 33) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(178, 17, 33); -webkit-box-  
shadow:4px 4px 4px 4px rgb(178, 17, 33);  
box-shadow:4px 4px 4px 4px rgb(178, 17,  
33) }
```

# Background

The CSS property to change the background color of an element to XYZ 18.8351, 9.9757, 2.3716 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(178, 17, 33) }
```

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

```
.background{ background-color: rgb(178, 17,  
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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