

# Converting Colors

XYZ(16.6881, 19.5716, 20.7657)

Have a look what the booklet for  
XYZ(16.6881, 19.5716, 20.7657)  
contains.

<b>XYZ(16.7029, 19.6780, 20.6872)</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> .....	31

# Color

**XYZ(16.7029, 19.6780,  
20.6872)**

# Conversions

## Conversions Part 1

Format	Color
Hex	678078
RGB	103, 128, 120
RGB Percent	40%, 50%, 47%
CMY	0.5961, 0.4980, 0.5294
CMYK	0.20, 0.00, 0.06, 0.50
HSL	161°, 11%, 45%
HSV	161°, 20%, 50%
XYZ	16.7029, 19.6780, 20.6872
YIQ	119.6130, -12.3320, -7.7880

# Conversions

## Conversions Part 2

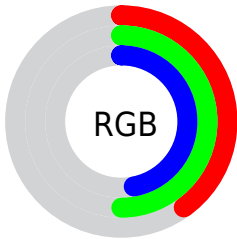
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	103, 118, 128
Decimal	6783096
CIE <sub>Lab</sub>	51.47, -10.76, 1.35
CIE <sub>LCh</sub>	51, 10.847, 172.836
Yxy	19.6780, 0.2927, 0.3448
Android (android.graphics.Color)	4284973176 (0xFF678078)
YUV	119.6130, 0.1908, -14.5696
Hunter-Lab	44.3599, -10.4189, 3.4021

# Details

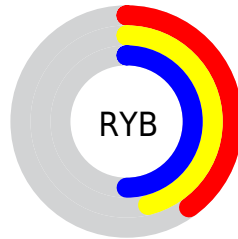
The XYZ color **16.7029, 19.6780, 20.6872** is a dark color, and the websafe version is hex **669999**. A complement of this color would be **16.6223, 15.4380, 17.1436**, and the grayscale version is **17.7318, 18.6553, 20.3156**.

A 20% lighter version of the original color is **37.2967, 42.8963, 45.3438**, and **5.5412, 6.8721, 7.1653** is the 20% darker color. If you saturate the color by 10%, you get **15.1024, 18.8816, 19.3423**, and if you desaturate by 10%, it is **18.5400, 20.5962, 22.0995**.

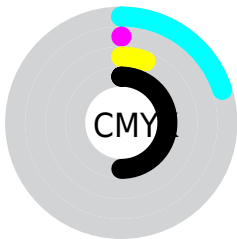
# Distribution



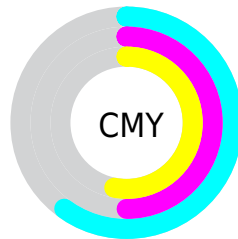
- Red (40%)
- Green (50%)
- Blue (47%)



- Red (40%)
- Yellow (46%)
- Blue (50%)



- Cyan (20%)
- Magenta (0%)
- Yellow (6%)
- Black (50%)



- Cyan (60%)
- Magenta (50%)
- Yellow (53%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 16.7029, 19.6780, 20.6872 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 16.7029, 19.6780, 20.6872 by changing the saturation by 10% instead.



■ 16.7029, 19.6780,  
20.6872

■ 16.7029, 19.6780,  
20.6872

226.6442,  
250.1666, 268.3377

■ 10.1169, 12.1612,  
12.7065

■ 37.3619, 42.8767,  
45.4404

■ 5.5394, 6.8536,  
7.0984

■ 52.1656, 59.3273,  
63.0500

■ 2.6051, 3.3707,  
3.4444

■ 70.4393, 79.5247,  
84.7063

■ 0.9485, 1.3282,  
1.3258

■ 92.5483, 103.8532,  
110.8279

■ 0.0000, 0.1629,  
0.0828

118.8579,  
132.6973, 141.8333

■ 0.0000, 0.0000,  
0.0000

149.7335,

166.4413, 178.1410

185.5405,  
205.4696, 220.1696

■ 16.7029, 19.6780,  
20.6872

■ 16.7029, 19.6780,  
20.6872

■ 15.1024, 18.8816,  
19.3423

■ 18.5400, 20.5962,  
22.0995

■ 13.7265, 18.1992,  
18.0624

■ 20.6216, 21.6387,  
23.5791

■ 12.5646, 17.6259,  
16.8466

■ 22.9574, 22.8111,  
25.1275

■ 11.6046, 17.1555,  
15.6938

■ 25.5562, 24.1176,  
26.7457

■ 10.8332, 16.7812,  
14.6025

■ 28.4260, 25.5627,  
28.4347

■ 10.2354, 16.4952,  
13.5713

■ 31.5748, 27.1502,  
30.1957

■ 9.7938, 16.2886,  
12.5987

■ 35.0101, 28.8842,  
32.0294

■ 9.4566, 16.1348,  
11.6813

■ 38.7391, 30.7682,  
33.9369

■ 9.4413, 16.1278,  
11.6396

■ 42.7689, 32.8059,  
35.9191

# Harmonies

## Analogous

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



17.0848, 19.6780, 18.0056



16.7029, 19.6780, 20.6872



16.8402, 19.6780, 23.8371

# Triad

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



16.7029, 19.6780, 20.6872



19.5273, 19.6780, 27.4378



19.9962, 19.6780, 16.9960

# Complementary

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



16.7029, 19.6780, 20.6872



16.6223, 15.4380, 17.1436

# 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.



20.6991, 19.6780, 19.1832



16.7029, 19.6780, 20.6872



20.4211, 19.6780, 25.2543

# Square

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



16.7029, 19.6780, 20.6872



18.4436, 19.6780, 27.9395



20.8575, 19.6780, 22.1822



18.9656, 19.6780, 16.0127



# Rectangle

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



16.7029, 19.6780, 20.6872



17.2104, 19.6780, 25.7646



20.8575, 19.6780, 22.1822



20.2803, 19.6780, 17.6040

# Sweetspot

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



16.7035, 19.6788, 20.6876



33.8355, 36.8590, 39.7785



16.7656, 19.8197, 15.7743



7.8783, 8.6079, 9.2818



62.3462, 65.5931, 71.4309



8.4577, 8.8982, 9.6901



# Same Dimension

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



16.7035, 19.6788, 20.6876



28.2322, 34.0601, 35.4614



16.6773, 18.8165, 23.1760



4.3897, 4.8642, 5.2233



9.3619, 15.9913, 11.5444



0.0000, 0.0000, 0.0000



# Inverse Universe

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



16.6223, 15.4380, 17.1436



28.0652, 25.3097, 28.1509



16.6260, 16.1193, 15.0674



4.3801, 4.3652, 4.8061



9.2239, 4.7093, 2.5030



0.0000, 0.0000, 0.0000



# Previews

## White Background



This preview shows how the XYZ color 16.7029, 19.6780, 20.6872 looks on a white 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



# Black Background



This preview shows how the XYZ color 16.7029, 19.6780, 20.6872 looks on a 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

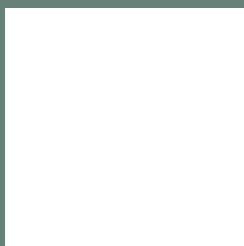
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**XYZ 16.7029, 19.6780, 20.6872**

## **Background**



This preview shows how black text looks on a background with the XYZ color 16.7029, 19.6780, 20.6872.



This preview shows how white text looks on a background with the XYZ color 16.7029, 19.6780,



# 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

16.7029, 19.6780, 20.6872

### Protanopia

18.7746, 19.6390, 19.6308

### Deuteranopia

19.8228, 19.4303, 21.1180



## Tritanopia

17.8486, 19.7635, 26.1666

# Trichromacy



## Original Color

16.7029, 19.6780, 20.6872

## Protanomaly

17.9489, 19.5749, 19.9719

## Deuteranomaly

18.5791, 19.5105, 20.8758

## Tritanomaly

17.4443, 19.7937, 24.0202

# Monochromacy



## Original Color

16.7029, 19.6780, 20.6872

## Achromatopsia

17.8524, 18.7821, 20.4537

## Achromatomaly

17.4126, 19.0994, 20.5381

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 16.7029, 19.6780, 20.6872 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(103, 128, 120)` looks like.

```
.text, #text, p{  
    color:rgb(103, 128, 120)  
}
```

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(103, 128, 120) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(103, 128, 120) }
```

## Border

The CSS property to change the border of an element to XYZ 16.7029, 19.6780, 20.6872 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(103, 128, 120) }
```



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

```
.border{ border-color:rgb(103, 128, 120) }
```

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

Here you see how a box with a 4 pixel `rgb(103, 128, 120)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(103, 128, 120); -webkit-box-  
shadow:4px 4px 4px 4px rgb(103, 128, 120);  
box-shadow:4px 4px 4px 4px rgb(103, 128,  
120) }
```

# Background

The CSS property to change the background color of an element to XYZ 16.7029, 19.6780, 20.6872 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(103, 128, 120) }
```

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

```
.background{ background-color: rgb(103,  
128, 120) }
```

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](#).

Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

@ConvertingColor