

# Converting Colors

XYZ(12.8285, 6.2415, 17.3992)

Have a look what the booklet for  
XYZ(12.8285, 6.2415, 17.3992)  
contains.

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# Color

**XYZ(12.8838, 6.2709,  
17.3610)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	850075
RGB	133, 0, 117
RGB Percent	52%, 0%, 46%
CMY	0.4784, 1.0000, 0.5412
CMYK	0.00, 1.00, 0.12, 0.48
HSL	307°, 100%, 26%
HSV	307°, 100%, 52%
XYZ	12.8838, 6.2709, 17.3610
YIQ	53.1050, 41.7110, 64.5830

# Conversions

## Conversions Part 2

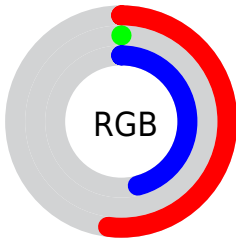
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	133, 0, 117
Decimal	8716405
CIE <sub>Lab</sub>	30.09, 58.20, -28.99
CIE <sub>LCh</sub>	30, 65.021, 333.519
Yxy	6.2709, 0.3528, 0.1717
Android (android.graphics.Color)	4286906485 (0xFF850075)
YUV	53.1050, 31.5002, 70.0679
Hunter-Lab	25.0418, 48.0138, -23.5754

# Details

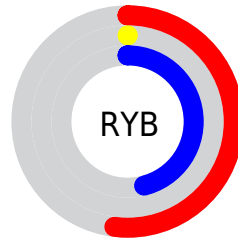
The XYZ color **12.8838, 6.2709, 17.3610** is a dark color, and the websafe version is hex **660066**. A complement of this color would be **8.4814, 16.8128, 3.2888**, and the grayscale version is **3.3569, 3.5317, 3.8460**.

A 20% lighter version of the original color is **30.8734, 18.6145, 39.9960**, and **4.2678, 2.0796, 5.6453** is the 20% darker color. If you saturate the color by 10%, you get **12.8838, 6.2710, 17.3607**, and if you desaturate by 10%, it is **13.1268, 6.6048, 17.9102**.

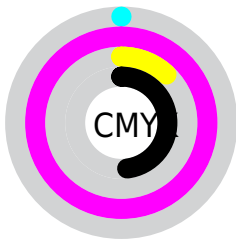
# Distribution



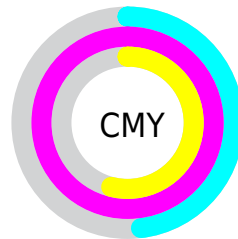
- Red (52%)
- Green (0%)
- Blue (46%)



- Red (52%)
- Yellow (0%)
- Blue (46%)



- Cyan (0%)
- Magenta (100%)
- Yellow (12%)
- Black (48%)



- Cyan (48%)
- Magenta (100%)
- Yellow (54%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 12.8838, 6.2709, 17.3610 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 12.8838, 6.2709, 17.3610 by changing the saturation by 10% instead.



12.8838, 6.2709,  
17.3610

12.8838, 6.2709,  
17.3610

203.8243,  
161.4601, 249.3582

7.4250, 3.0105,  
10.3275

30.6980, 18.4907,  
39.7445

3.7780, 1.1372,  
5.5082

43.7841, 28.2188,  
55.9317

1.5773, 0.0095,  
2.4845

60.1433, 40.8716,  
76.0072

0.3776, 0.0000,  
0.8319


80.1411, 56.8336,  
100.3895


0.0000, 0.0000,  
0.0000

104.1427, 76.4890,  
129.4972


132.5135,

100.2223, 163.7489


 165.6189,  
128.4179, 203.5630


 12.8838, 6.2709,  
17.3610


 12.8838, 6.2709,  
17.3610


 12.8838, 6.2710,  
17.3607

 13.1268, 6.6048,  
17.9102

 13.4584, 7.1137,  
18.4970

 13.9293, 7.8984,  
19.1381

 14.5561, 8.9922,  
19.8393

 15.3530, 10.4237,  
20.6053

■ 16.3327, 12.2183,  
21.4403

■ 17.5067, 14.3987,  
22.3483

■ 18.8855, 16.9861,  
23.3327

■ 20.4789, 19.9999,  
24.3969

# Harmonies

## Analogous

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



9.8117, 6.2709, 32.5042



12.8838, 6.2709, 17.3610



13.9185, 6.2709, 5.8499

# Triad

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



12.8838, 6.2709, 17.3610



5.6082, 6.2709, 0.0000



2.2912, 6.2709, 20.8969

# Complementary

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



12.8838, 6.2709, 17.3610



8.4814, 16.8128, 3.2888

# 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.



1.8192, 6.2709, 7.9094



12.8838, 6.2709, 17.3610



3.2773, 6.2709, 0.0000

# Square

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



12.8838, 6.2709, 17.3610



8.9695, 6.2709, 0.0000



2.1065, 6.2709, 1.7493



3.7129, 6.2709, 35.5036



# Rectangle

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



12.8838, 6.2709, 17.3610



13.0987, 6.2709, 2.0855



2.1065, 6.2709, 1.7493



2.0432, 6.2709, 15.9389

# Sweetspot

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



12.8840, 6.2712, 17.3611



31.1939, 25.4924, 39.9042



4.4395, 1.7997, 22.3040



6.8512, 5.4145, 8.8564



64.0503, 67.3860, 73.3833



8.9945, 9.4630, 10.3052



# Same Dimension

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



12.8840, 6.2712, 17.3611



23.0338, 11.2146, 30.8877



10.2705, 5.2258, 3.5982



4.8344, 4.7534, 5.7404



12.2739, 5.9739, 16.5463



0.0442, 0.0214, 0.0662



# Inverse Universe

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



12.8840, 6.2712, 17.3611



23.0338, 11.2146, 30.8877



9.9116, 17.3849, 10.8201



4.8344, 4.7534, 5.7404



12.2739, 5.9739, 16.5463



0.0442, 0.0214, 0.0662



# Previews

## White Background



This preview shows how the XYZ color 12.8838, 6.2709, 17.3610 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

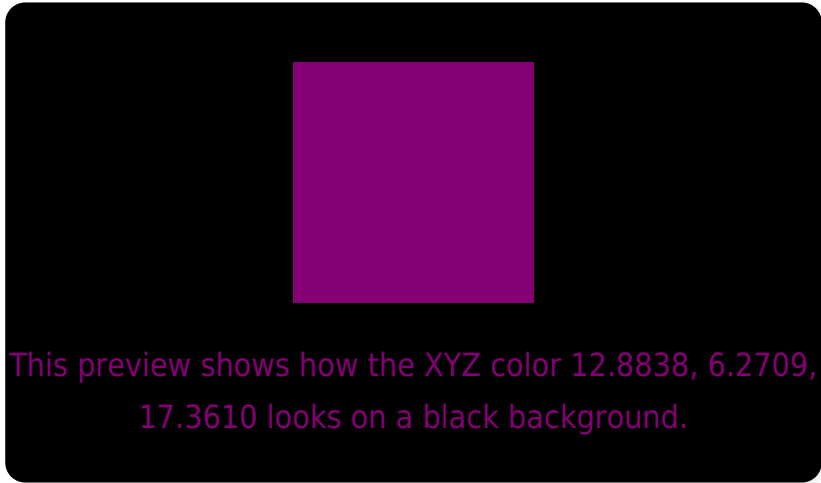
Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass



# Black Background



## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

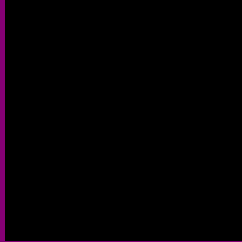
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

**XYZ 12.8838, 6.2709, 17.3610**

## **Background**



This preview shows how black text looks on a background with the XYZ color 12.8838, 6.2709, 17.3610.



This preview shows how white text looks on a background with the XYZ color 12.8838, 6.2709,



# 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

12.8838, 6.2709, 17.3610

### Protanopia

7.9849, 6.9017, 30.6171

### Deuteranopia

7.0082, 6.9229, 15.7187



## Tritanopia

10.2838, 6.6878, 3.6546

# Trichromacy



## Original Color

12.8838, 6.2709, 17.3610

## Protanomaly

6.8561, 4.4464, 24.9230

## Deuteranomaly

7.7435, 5.1566, 16.2100

## Tritanomaly

10.7287, 6.0403, 7.0790

# Monochromacy



## Original Color

12.8838, 6.2709, 17.3610

## Achromatopsia

3.3839, 3.5601, 3.8770

## Achromatomaly

5.3562, 3.4597, 7.2230

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 12.8838, 6.2709, 17.3610 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(133, 0, 117)` looks like.

```
.text, #text, p{  
    color:rgb(133, 0, 117)  
}
```

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(133, 0, 117) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(133, 0, 117) }
```

## Border

The CSS property to change the border of an element to XYZ 12.8838, 6.2709, 17.3610 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(133, 0, 117) }
```



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

```
.border{ border-color:rgb(133, 0, 117) }
```

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

Here you see how a box with a 4 pixel rgb(133, 0, 117) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(133, 0, 117); -webkit-box-  
shadow:4px 4px 4px 4px rgb(133, 0, 117);  
box-shadow:4px 4px 4px 4px rgb(133, 0,  
117) }
```

# Background

The CSS property to change the background color of an element to XYZ 12.8838, 6.2709, 17.3610 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(133, 0, 117) }
```

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

```
.background{ background-color: rgb(133, 0,  
117) }
```

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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