

# Converting Colors

XYZ(12.8033, 19.9250, 3.6511)

Have a look what the booklet for  
XYZ(12.8033, 19.9250, 3.6511)  
contains.

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# Color

**XYZ(12.7855, 19.8600,  
3.6497)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	558910
RGB	85, 137, 16
RGB Percent	33%, 54%, 6%
CMY	0.6667, 0.4627, 0.9372
CMYK	0.38, 0.00, 0.88, 0.46
HSL	86°, 79%, 30%
HSV	86°, 88%, 54%
XYZ	12.7855, 19.8600, 3.6497
YIQ	107.6580, 7.8490, -48.6550

# Conversions

## Conversions Part 2

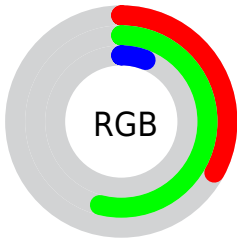
<b>Format</b>	<b>Color</b>
<b>RYB</b>	16, 137, 68
Decimal	5605648
CIELab	51.68, -35.53, 52.20
CIELCh	52, 63.144, 124.238
Yxy	19.8600, 0.3523, 0.5472
Android (android.graphics.Color)	4283795728 (0xFF558910)
YUV	107.6580, -45.1874, -19.8711
Hunter-Lab	44.5646, -26.7766, 26.3395

# Details

The XYZ color **12.7855, 19.8600, 3.6497** is a dark color, and the websafe version is hex **669933**. A complement of this color would be **7.0856, 3.4063, 23.9520**, and the grayscale version is **14.2796, 15.0233, 16.3603**.

A 20% lighter version of the original color is **30.5143, 43.2450, 13.2174**, and **3.8929, 6.9469, 1.1357** is the 20% darker color. If you saturate the color by 10%, you get **12.1925, 19.5643, 3.1999**, and if you desaturate by 10%, it is **13.4801, 20.2029, 4.3979**.

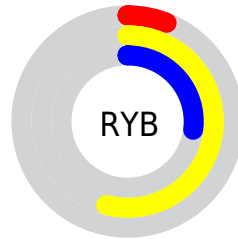
# Distribution



Red (33%)

Green (54%)

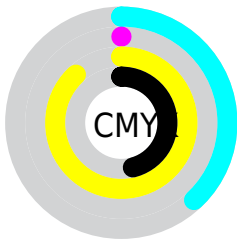
Blue (6%)



Red (6%)

Yellow (54%)

Blue (27%)

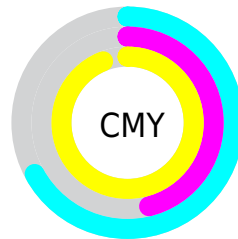


Cyan (38%)

Magenta (0%)

Yellow (88%)

Black (46%)



Cyan (67%)

Magenta (46%)

Yellow (94%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 12.7855, 19.8600, 3.6497 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 12.7855, 19.8600, 3.6497 by changing the saturation by 10% instead.



■ 12.7855, 19.8600,  
3.6497

■ 12.7855, 19.8600,  
3.6497

203.2039,  
251.1562, 144.2484

■ 7.3570, 12.2933,  
1.4352

■ 30.5225, 43.1823,  
13.1935

■ 3.7346, 6.9438,  
0.1690

■ 43.5617, 59.7068,  
21.3598

■ 1.5531, 3.4270,  
0.0000

■ 59.8685, 79.9859,  
32.3472

■ 0.3616, 1.3585,  
0.0000

■ 79.8082, 104.4042,  
46.5741


■ 0.0000, 0.1858,  
0.0000


■ 103.7463,  
133.3460, 64.4592


■ 0.0000, 0.0000,  
0.0000


■ 132.0480,


167.1956, 86.4209


 165.0787,  
206.3376, 112.8777


 12.7855, 19.8600,  
3.6497


 12.7855, 19.8600,  
3.6497


 12.1925, 19.5643,  
3.1999


 13.4801, 20.2029,  
4.3979

 12.0978, 19.5169,  
3.1295

 14.2956, 20.5987,  
5.5474

 15.2424, 21.0524,  
7.1452

 16.3291, 21.5675,  
9.2313

 17.5633, 22.1473,  
11.8415

■ 18.9521, 22.7946,  
15.0080

■ 20.5020, 23.5122,  
18.7604

■ 22.2191, 24.3025,  
23.1266

■ 24.1092, 25.1681,  
28.1321

# Harmonies

## Analogous

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



17.9848, 19.8600, 2.1095



12.7855, 19.8600, 3.6497



9.8491, 19.8600, 9.6737

# Triad

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



12.7855, 19.8600, 3.6497



14.0343, 19.8600, 71.1518



33.9292, 19.8600, 19.1320

# Complementary

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



12.7855, 19.8600, 3.6497



7.0856, 3.4063, 23.9520

# 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.



32.2077, 19.8600, 40.7517



12.7855, 19.8600, 3.6497



19.7968, 19.8600, 78.9251

# Square

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



12.7855, 19.8600, 3.6497



10.4480, 19.8600, 47.9997



26.6470, 19.8600, 65.5651



30.9314, 19.8600, 7.2760



# Rectangle

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



12.7855, 19.8600, 3.6497



9.1185, 19.8600, 18.2880



26.6470, 19.8600, 65.5651



33.8872, 19.8600, 25.3433

# Sweetspot

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



12.7860, 19.8609, 3.6501



34.4007, 41.0339, 27.9693



12.3835, 9.3020, 1.6333



7.5409, 9.1224, 5.8609



65.7814, 69.2071, 75.3665



9.5508, 10.0482, 10.9424



# Same Dimension

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



12.7860, 19.8609, 3.6501



21.4749, 34.8522, 5.5953



9.4680, 18.1504, 3.4949



5.2269, 5.7397, 5.3848



11.2824, 18.1863, 2.9157



0.0918, 0.1295, 0.0202



# Inverse Universe

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



7.0856, 3.4063, 23.9520



11.1240, 4.8005, 42.7235



13.4414, 6.6829, 24.2495



4.9652, 4.9905, 6.3074



5.8928, 2.5520, 22.2277



0.0554, 0.0253, 0.1484



# Previews

## White Background



This preview shows how the XYZ color 12.7855, 19.8600, 3.6497 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

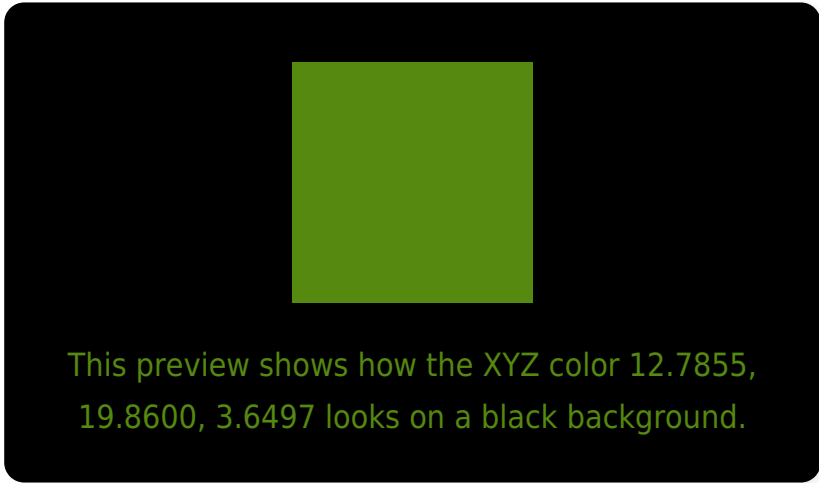
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



## 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 12.7855, 19.8600, 3.6497**

## **Background**



This preview shows how black text looks on a background with the XYZ color 12.7855, 19.8600, 3.6497.



This preview shows how white text looks on a background with the XYZ color 12.7855, 19.8600,



# 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

12.7855, 19.8600, 3.6497

### Protanopia

17.6246, 19.5934, 3.1696

### Deuteranopia

19.8191, 19.4597, 4.0078



## Tritanopia

17.4323, 19.7230, 26.9329

# Trichromacy



## Original Color

12.7855, 19.8600, 3.6497

## Protanomaly

15.3996, 19.3893, 3.3116

## Deuteranomaly

16.4474, 19.1570, 3.8081

## Tritanomaly

14.8560, 19.4736, 13.5655

# Monochromacy



## Original Color

12.7855, 19.8600, 3.6497

## Achromatopsia

14.2537, 14.9960, 16.3306

## Achromatomaly

13.1224, 16.4110, 9.1326

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 12.7855, 19.8600, 3.6497 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(85, 137, 16)` looks like.

```
.text, #text, p{  
    color:rgb(85, 137, 16)  
}
```

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(85, 137, 16) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(85, 137, 16) }
```

## Border

The CSS property to change the border of an element to XYZ 12.7855, 19.8600, 3.6497 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(85, 137, 16) }
```



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

```
.border{ border-color:rgb(85, 137, 16) }
```

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

Here you see how a box with a 4 pixel `rgb(85, 137, 16)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(85, 137, 16); -webkit-box-  
shadow:4px 4px 4px 4px rgb(85, 137, 16);  
box-shadow:4px 4px 4px 4px rgb(85, 137,  
16) }
```

# Background

The CSS property to change the background color of an element to XYZ 12.7855, 19.8600, 3.6497 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(85, 137, 16) }
```

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

```
.background{ background-color: rgb(85, 137,  
16) }
```

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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