

# Converting Colors

XYZ(31.8199, 27.7946, 77.1934)

Have a look what the booklet for  
XYZ(31.8199, 27.7946, 77.1934)  
contains.

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# Color

**XYZ(31.8610, 27.8769,  
77.1003)**

# Conversions

## Conversions Part 1

Format	Color
Hex	8188E4
RGB	129, 136, 228
RGB Percent	51%, 53%, 89%
CMY	0.4941, 0.4667, 0.1059
CMYK	0.43, 0.40, 0.00, 0.11
HSL	236°, 65%, 70%
HSV	236°, 43%, 89%
XYZ	31.8610, 27.8769, 77.1003
YIQ	144.3950, -33.7040, 27.1280

# Conversions

## Conversions Part 2

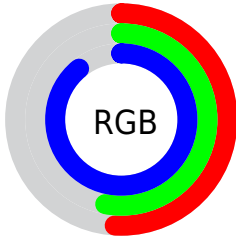
Format	Color
R <sub>Y</sub> B	129, 136, 228
Decimal	8489188
CIE Lab	59.78, 20.70, -47.61
CIE LCh	60, 51.920, 293.502
Yxy	27.8769, 0.2328, 0.2037
Android (android.graphics.Color)	4286679268 (0xFF8188E4)
YUV	144.3950, 41.2173, -13.5014
Hunter-Lab	52.7986, 15.3173, -49.6205

# Details

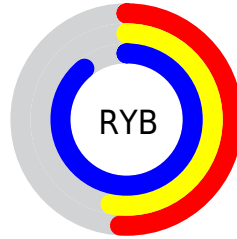
The XYZ color **31.8610, 27.8769, 77.1003** is a light color, and the websafe version is hex **9999FF**. A complement of this color would be **61.8150, 69.7935, 30.9838**, and the grayscale version is **26.5180, 27.8990, 30.3821**.

A 20% lighter version of the original color is **56.4973, 54.0543, 102.0635**, and **13.5218, 11.0506, 40.4500** is the 20% darker color. If you saturate the color by 10%, you get **26.0814, 20.8972, 76.0583**, and if you desaturate by 10%, it is **39.0052, 36.4365, 78.3765**.

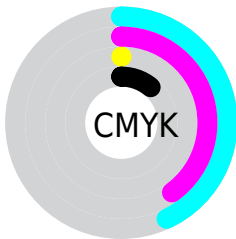
# Distribution



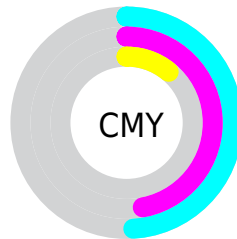
- Red (51%)
- Green (53%)
- Blue (89%)



- Red (51%)
- Yellow (53%)
- Blue (89%)



- Cyan (43%)
- Magenta (40%)
- Yellow (0%)
- Black (11%)



- Cyan (49%)
- Magenta (47%)
- Yellow (11%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 31.8610, 27.8769, 77.1003 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 31.8610, 27.8769, 77.1003 by changing the saturation by 10% instead.



■ 31.8610, 27.8769,  
77.1003

■ 31.8610, 27.8769,  
77.1003

302.2421,  
291.8782, 504.5527

■ 21.4104, 18.2329,  
56.8231

■ 61.9598, 56.2878,  
131.0554

■ 13.5385, 11.1173,  
40.4549

■ 82.3387, 75.8236,  
165.5703

■ 7.8799, 6.1458,  
27.5769

■ 106.7577, 99.4253,  
205.6684

■ 4.0694, 2.9339,  
17.7707

135.5822,  
127.4775, 251.7679

■ 1.7415, 1.0973,  
10.6177

169.1775,  
160.3645, 304.2876

■ 0.4820, 0.0000,  
5.6995

207.9090,

■ 0.0000, 0.0000,

198.4706, 363.6459

2.5974

252.1421,  
242.1804, 430.2614

■ 0.0000, 0.0000,  
0.8911

■ 0.0000, 0.0000,  
0.0000

■ 31.8610, 27.8769,  
77.1003

■ 31.8610, 27.8769,  
77.1003

■ 26.0814, 20.8972,  
76.0583

■ 39.0052, 36.4365,  
78.3765

■ 21.5762, 15.3979,  
75.2342

■ 47.5901, 46.6615,  
79.8976

■ 18.2496, 11.2725,  
74.6133

■ 57.6899, 58.6349,  
81.6764

■ 15.9905, 8.3993,  
74.1778

■ 69.3728, 72.4330,  
83.7240

■ 14.6666, 6.6347,  
73.9069

■ 82.7029, 88.1279,  
86.0508

■ 14.1907, 5.9755,  
73.8048

■ 91.0037, 98.3815,  
87.5924

# Harmonies

## Analogous

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



25.0918, 27.8769, 82.3716



31.8610, 27.8769, 77.1003



38.0065, 27.8769, 57.3650

# Triad

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



31.8610, 27.8769, 77.1003



34.7445, 27.8769, 9.5670



15.8204, 27.8769, 26.4394

# Complementary

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



31.8610, 27.8769, 77.1003



61.8150, 69.7935, 30.9838

# 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.



17.5816, 27.8769, 13.5163



31.8610, 27.8769, 77.1003



27.9520, 27.8769, 6.7269

# Square

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



31.8610, 27.8769, 77.1003



39.8544, 27.8769, 18.0888



21.7701, 27.8769, 7.7929



16.5160, 27.8769, 47.1913



# Rectangle

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



31.8610, 27.8769, 77.1003



40.5515, 27.8769, 41.8328



21.7701, 27.8769, 7.7929



16.1338, 27.8769, 21.1930

# Sweetspot

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



31.8621, 27.8779, 77.1010



74.8359, 76.1412, 105.3602



49.6828, 65.3088, 77.5247



15.3588, 15.5172, 22.4356



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091



# Same Dimension

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



31.8621, 27.8779, 77.1010



34.3534, 27.8280, 98.1685



38.4868, 29.8774, 77.1378



13.6643, 14.0499, 18.1360



8.2253, 3.5127, 42.6277



0.6367, 0.3173, 3.1597



# Inverse Universe

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



44.2901, 33.9734, 27.5166



52.3981, 36.9373, 26.1165



52.1393, 67.6059, 31.0716



14.4181, 14.3844, 15.1362



18.5452, 9.5523, 1.2343

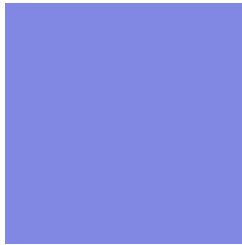


1.3850, 0.7117, 0.1679



# Previews

## White Background



This preview shows how the XYZ color 31.8610, 27.8769, 77.1003 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

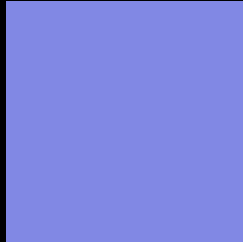
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 31.8610, 27.8769, 77.1003 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 31.8610, 27.8769, 77.1003**

## **Background**



This preview shows how black text looks on a background with the XYZ color 31.8610, 27.8769, 77.1003.



This preview shows how white text looks on a background with the XYZ color 31.8610, 27.8769,



# 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

31.8610, 27.8769, 77.1003

### Protanopia

30.2747, 28.0641, 80.1652

### Deuteranopia

28.8463, 28.0902, 75.8531



## Tritanopia

24.1100, 27.8661, 38.2904

# Trichromacy



## Original Color

31.8610, 27.8769, 77.1003

## Protanomaly

30.8589, 27.9478, 79.3693

## Deuteranomaly

29.8204, 27.9108, 76.4887

## Tritanomaly

26.4595, 27.6475, 50.3963

# Monochromacy



## Original Color

31.8610, 27.8769, 77.1003

## Achromatopsia

26.5089, 27.8894, 30.3716

## Achromatomaly

27.9102, 27.6339, 44.4203

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 31.8610, 27.8769, 77.1003 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(129, 136, 228)` looks like.

```
.text, #text, p{  
    color:rgb(129, 136, 228)  
}
```

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(129, 136, 228) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(129, 136, 228) }
```

## Border

The CSS property to change the border of an element to XYZ 31.8610, 27.8769, 77.1003 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(129, 136, 228) }
```



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

```
.border{ border-color:rgb(129, 136, 228) }
```

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

Here you see how a box with a 4 pixel rgb(129, 136, 228) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(129, 136, 228); -webkit-box-  
shadow:4px 4px 4px 4px rgb(129, 136, 228);  
box-shadow:4px 4px 4px 4px rgb(129, 136,  
228) }
```

# Background

The CSS property to change the background color of an element to XYZ 31.8610, 27.8769, 77.1003 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(129, 136, 228) }
```

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

```
.background{ background-color: rgb(129,  
136, 228) }
```

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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