

# Converting Colors

`RYB(128, 70, 157)`

Have a look what the booklet for  
RYB(128, 70, 157) contains.

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# Color

**R<sub>Y</sub>B(128, 70, 157)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	80469D
RGB	128, 70, 157
RGB Percent	50%, 27%, 62%
CMY	0.4980, 0.7255, 0.3843
CMYK	0.18, 0.55, 0.00, 0.38
HSL	280°, 38%, 45%
HSV	280°, 55%, 62%
XYZ	17.1780, 11.4038, 33.1941
YIQ	97.2600, 6.6410, 39.3530

# Conversions

## Conversions Part 2

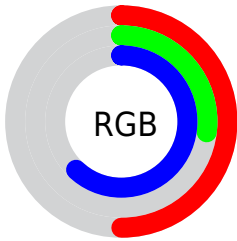
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	128, 70, 157
Decimal	8406685
CIE <sub>Lab</sub>	40.25, 40.23, -37.62
CIE <sub>LCh</sub>	40, 55.075, 316.918
Yxy	11.4038, 0.2781, 0.1846
Android (android.graphics.Color)	4286596765 (0xFF80469D)
YUV	97.2600, 29.4518, 26.9590
Hunter-Lab	33.7696, 31.7034, -34.6409

# Details

The RYB color **128, 70, 157** is a dark color, and the websafe version is hex **663399**. A complement of this color would be **70, 157, 128**, and the grayscale version is **97, 97, 97**.

A 20% lighter version of the original color is **183, 121, 212**, and **76, 20, 105** is the 20% darker color. If you saturate the color by 10%, you get **123, 54, 157**, and if you desaturate by 10%, it is **133, 86, 157**.

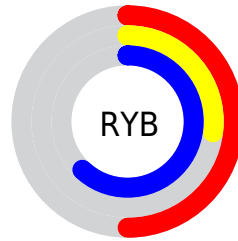
# Distribution



Red (50%)

Green (27%)

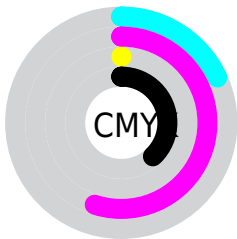
Blue (62%)



Red (50%)

Yellow (27%)

Blue (62%)

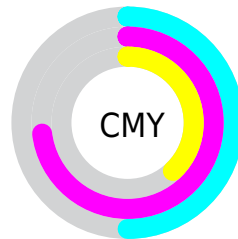


Cyan (18%)

Magenta (55%)

Yellow (0%)

Black (38%)



Cyan (50%)

Magenta (73%)

Yellow (38%)

# Brightness & Saturation Gradients

These gradients show how the RYB color 128, 70, 157 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 RYB color 128, 70, 157 by changing the saturation by 10% instead.





128, 70, 157



128, 70, 157

255, 255, 255



102, 45, 131



183, 121, 212



76, 20, 105



211, 147, 241



50, 0, 80



240, 174, 255



31, 0, 57



255, 202, 255



0, 2, 34



255, 231, 255



0, 0, 9



0, 0, 0



128, 70, 157



128, 70, 157



123, 54, 157



133, 86, 157

■ 118, 39, 157

■ 138, 101, 157

■ 112, 23, 157

■ 144, 117, 157

■ 107, 7, 157

■ 149, 133, 157

■ 105, 0, 157

■ 154, 149, 157

■ 157, 164, 162

■ 157, 180, 172

■ 157, 196, 183

■ 157, 211, 193

# Harmonies

## Analogous

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



42, 78, 182



128, 70, 157



165, 48, 117

# Triad

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



128, 70, 157



69, 131, 0



0, 59, 120

# Complementary

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



128, 70, 157



70, 157, 128

# 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.



0, 69, 114



128, 70, 157



0, 101, 10

# Square

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



128, 70, 157



160, 79, 29



26, 109, 103



0, 66, 160

# Rectangle

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



128, 70, 157



174, 44, 86



26, 109, 103



0, 60, 115



# Sweetspot

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



128, 70, 157



192, 169, 204



70, 92, 157



95, 82, 102



230, 230, 230



102, 102, 102



# Same Dimension

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



128, 70, 157



159, 69, 204



157, 70, 144



76, 71, 79



95, 0, 143



10, 0, 15



# Inverse Universe

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



157, 70, 99



204, 69, 114



70, 146, 157



79, 71, 74



143, 0, 48

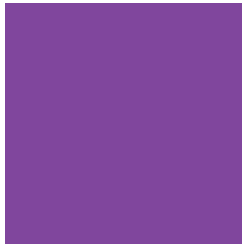


15, 0, 5



# Previews

## White Background



This preview shows how the RYB color 128, 70, 157 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 × Fail

# Black Background



This preview shows how the RYB color 128, 70, 157 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

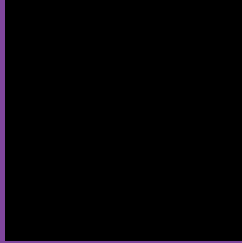
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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



## RYB 128, 70, 157 Background



This preview shows how black text looks on a background with the RYB color 128, 70, 157.

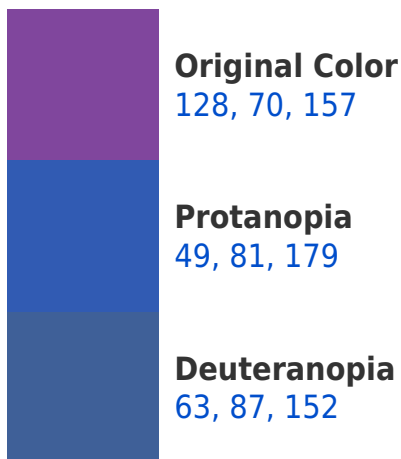


This preview shows how white text looks on a background with the RYB color 128, 70, 157.

# 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





**Tritanopia**  
118, 87, 93

# Trichromacy



**Original Color**  
128, 70, 157

**Protanomaly**  
78, 84, 171

**Deuteranomaly**  
87, 86, 154

**Tritanomaly**  
122, 81, 116

# Monochromacy



**Original Color**  
128, 70, 157

**Achromatopsia**  
97, 97, 97

**Achromatomaly**  
108, 87, 119

# CSS Examples

## Text

The CSS property to change the color of the text to RYB 128, 70, 157 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(128, 70, 157)` looks like.

```
.text, #text, p{  
    color:rgb(128, 70, 157)  
}
```

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(128, 70, 157) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(128, 70, 157) }
```

## Border

The CSS property to change the border of an element to RYB 128, 70, 157 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(128, 70, 157) }
```

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

```
.border{ border-color:rgb(128, 70, 157) }
```

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

Here you see how a box with a 4 pixel rgb(128, 70, 157) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(128, 70, 157); -webkit-box-  
shadow:4px 4px 4px 4px rgb(128, 70, 157);  
box-shadow:4px 4px 4px 4px rgb(128, 70,  
157) }
```

# Background

The CSS property to change the background color of an element to RGB 128, 70, 157 is called "background".

The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(128, 70, 157) }
```

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

```
.background{ background-color: rgb(128, 70,  
157) }
```

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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