

# Converting Colors

`RYB(80, 70, 187)`

Have a look what the booklet for  
RYB(80, 70, 187) contains.

<b>RYB(80, 70, 187)</b> .....	3
<i><b>Conversions</b></i> .....	4
<i><b>Details</b></i> .....	6
<i><b>Harmonies</b></i> .....	11
<i><b>Previews</b></i> .....	23
<i><b>Color Blindness Simulation</b></i> .....	26
<i><b>CSS Examples</b></i> .....	29

# Color

**R<sub>Y</sub>B(80, 70, 187)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	5046BB
RGB	80, 70, 187
RGB Percent	31%, 27%, 73%
CMY	0.6863, 0.7255, 0.2667
CMYK	0.57, 0.63, 0.00, 0.27
HSL	245°, 46%, 50%
HSV	245°, 63%, 73%
XYZ	14.4681, 9.6736, 48.1184
YIQ	86.3280, -31.5970, 38.5070

# Conversions

## Conversions Part 2

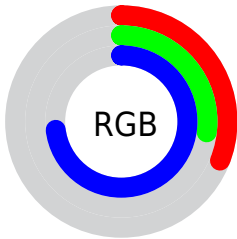
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	80, 70, 187
Decimal	5260987
CIE <sub>Lab</sub>	37.25, 37.44, -60.53
CIE <sub>LCh</sub>	37, 71.174, 301.740
Yxy	9.6736, 0.2002, 0.1339
Android (android.graphics.Color)	4283451067 (0xFF5046BB)
YUV	86.3280, 49.6313, -5.5497
Hunter-Lab	31.1025, 28.6042, -69.9552

# Details

The RYB color **80, 70, 187** is a dark color, and the websafe version is hex **333399**. A complement of this color would be **70, 187, 80**, and the grayscale version is **86, 86, 86**.

A 20% lighter version of the original color is **138, 119, 244**, and **0, 21, 133** is the 20% darker color. If you saturate the color by 10%, you get **63, 51, 187**, and if you desaturate by 10%, it is **97, 89, 187**.

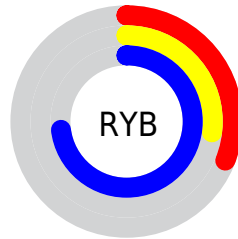
# Distribution



Red (31%)

Green (27%)

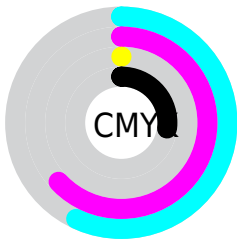
Blue (73%)



Red (31%)

Yellow (27%)

Blue (73%)

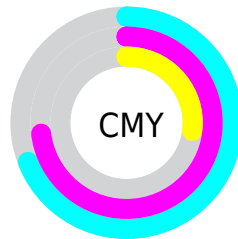


Cyan (57%)

Magenta (63%)

Yellow (0%)

Black (27%)



Cyan (69%)

Magenta (73%)

Yellow (27%)

# Brightness & Saturation Gradients

These gradients show how the RYB color 80, 70, 187 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 80, 70, 187 by changing the saturation by 10% instead.



 80, 70, 187

255, 255, 255

 138, 119, 244

 167, 145, 255

 197, 172, 255

 226, 199, 255

 255, 227, 255

 80, 70, 187

 48, 47, 159

 0, 21, 133

 0, 5, 107

 0, 0, 82

 0, 5, 58

 0, 2, 35

 0, 0, 10

 0, 0, 0

 80, 70, 187

 80, 70, 187

■ 63, 51, 187

■ 97, 89, 187

■ 46, 33, 187

■ 114, 107, 187

■ 29, 14, 187

■ 131, 126, 187

■ 16, 0, 187

■ 148, 145, 187

■ 166, 163, 187

■ 183, 182, 187

■ 187, 201, 188

■ 187, 220, 190

■ 187, 238, 191

# Harmonies

## Analogous

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



0, 65, 205



80, 70, 187



156, 23, 143

# Triad

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



80, 70, 187



149, 103, 0



0, 61, 110

# Complementary

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



80, 70, 187



70, 187, 80

# 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, 86, 107



80, 70, 187



22, 105, 0

# Square

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



80, 70, 187



177, 9, 31



0, 101, 58



0, 63, 147

# Rectangle

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



80, 70, 187



178, 0, 106



0, 101, 58



0, 68, 110



# Sweetspot

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



80, 70, 187



200, 196, 242



70, 126, 187



97, 94, 122



250, 250, 250



122, 122, 122



# Same Dimension

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



80, 70, 187



76, 61, 242



138, 70, 187



86, 85, 94



14, 0, 158



3, 0, 31



# Inverse Universe

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



187, 70, 177



242, 61, 227



70, 187, 138



94, 85, 94



158, 0, 145

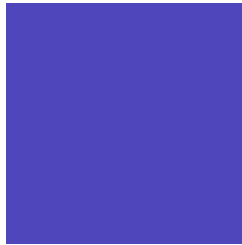


31, 0, 28



# Previews

## White Background



This preview shows how the RYB color 80, 70, 187 looks on a white background.

## Color Contrast Check

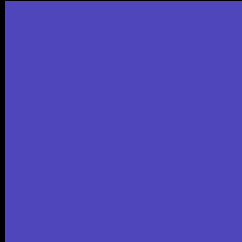
Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

# Black Background



This preview shows how the RYB color 80, 70, 187 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

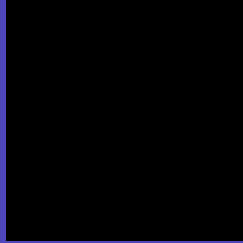
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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



## **RYB 80, 70, 187 Background**



This preview shows how black text looks on a background with the RYB color 80, 70, 187.

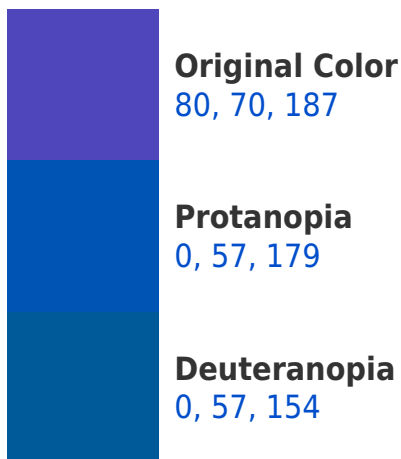


This preview shows how white text looks on a background with the RYB color 80, 70, 187.

# 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**  
46, 72, 102

# Trichromacy



**Original Color**  
80, 70, 187

**Protanomaly**  
29, 67, 182

**Deuteranomaly**  
29, 68, 166

**Tritanomaly**  
58, 78, 133

# Monochromacy



**Original Color**  
80, 70, 187

**Achromatopsia**  
86, 86, 86

**Achromatomaly**  
84, 80, 123

# CSS Examples

## Text

The CSS property to change the color of the text to RYB 80, 70, 187 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(80, 70, 187)` looks like.

```
.text, #text, p{  
    color:rgb(80, 70, 187)  
}
```

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(80, 70, 187) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(80, 70, 187) }
```

## Border

The CSS property to change the border of an element to RYB 80, 70, 187 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(80, 70, 187) }
```

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

```
.border{ border-color:rgb(80, 70, 187) }
```

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

Here you see how a box with a 4 pixel `rgb(80, 70, 187)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(80, 70, 187); -webkit-box-  
shadow:4px 4px 4px 4px rgb(80, 70, 187);  
box-shadow:4px 4px 4px 4px rgb(80, 70,  
187) }
```

# Background

The CSS property to change the background color of an element to RGB 80, 70, 187 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(80, 70, 187) }
```

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

```
.background{ background-color: rgb(80, 70,  
187) }
```

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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