

# Converting Colors

`RYB(31, 72, 180)`

Have a look what the booklet for  
RYB(31, 72, 180) contains.

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# Color

**$\text{RYB}(31, 72, 180)$**

# Conversions

## Conversions Part 1

Format	Color
Hex	1F58B4
RGB	31, 88, 180
RGB Percent	12%, 35%, 71%
CMY	0.8784, 0.6566, 0.2941
CMYK	0.83, 0.51, 0.00, 0.29
HSL	217°, 71%, 41%
HSV	217°, 83%, 71%
XYZ	12.2574, 10.4948, 44.5597
YIQ	81.4450, -63.5040, 16.5280

# Conversions

## Conversions Part 2

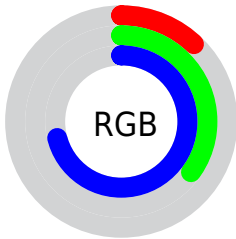
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	31, 72, 180
Decimal	2054324
CIE <sub>Lab</sub>	38.72, 16.77, -54.15
CIE <sub>LCh</sub>	39, 56.686, 287.206
Yxy	10.4948, 0.1821, 0.1559
Android (android.graphics.Color)	4280244404 (0xFF1F58B4)
YUV	81.4450, 48.5876, -44.2403
Hunter-Lab	32.3957, 10.8457, -58.8753

# Details

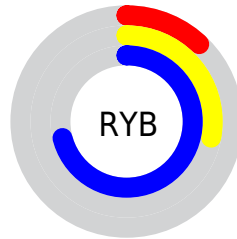
The RYB color **31, 72, 180** is a dark color, and the websafe version is hex **3366CC**. A complement of this color would be **123, 180, 31**, and the grayscale version is **81, 81, 81**.

A 20% lighter version of the original color is **102, 130, 237**, and **0, 33, 126** is the 20% darker color. If you saturate the color by 10%, you get **13, 59, 180**, and if you desaturate by 10%, it is **49, 85, 180**.

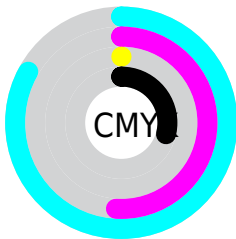
# Distribution



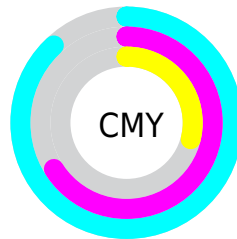
- Red (12%)
- Green (35%)
- Blue (71%)



- Red (12%)
- Yellow (28%)
- Blue (71%)



- Cyan (83%)
- Magenta (51%)
- Yellow (0%)
- Black (29%)






















- Cyan (88%)
- Magenta (66%)
- Yellow (29%)

# Brightness & Saturation Gradients

These gradients show how the RYB color 31, 72, 180 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 31, 72, 180 by changing the saturation by 10% instead.



 31, 72, 180	 31, 72, 180
 255, 255, 255	 0, 46, 153
 102, 130, 237	 0, 33, 126
 132, 157, 255	 0, 20, 101
 161, 183, 255	 0, 1, 76
 191, 209, 255	 0, 4, 52
 221, 235, 255	 0, 2, 30
 251, 253, 255	 0, 0, 1
	 0, 0, 0
 31, 72, 180	 31, 72, 180

■ 13, 59, 180

■ 49, 85, 180

■ 0, 49, 180

■ 67, 98, 180

■ 85, 111, 180

■ 103, 124, 180

■ 121, 137, 180

■ 139, 151, 180

■ 157, 163, 180

■ 175, 176, 180

■ 188, 193, 180

# Harmonies

## Analogous

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



0, 65, 182



31, 72, 180



125, 65, 154

# Triad

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



31, 72, 180



157, 74, 23



0, 68, 110

# Complementary

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



31, 72, 180



123, 180, 31

# 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.



19, 106, 104



31, 72, 180



70, 127, 0

# Square

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



31, 72, 180



171, 38, 67



0, 97, 11



0, 57, 117

# Rectangle

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



31, 72, 180



154, 48, 128



0, 97, 11



0, 73, 109



# Sweetspot

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



31, 72, 180



176, 192, 235



31, 123, 180



82, 91, 117



245, 245, 245



117, 117, 117



# Same Dimension

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



31, 72, 180



2, 66, 235



48, 31, 180



80, 83, 89



0, 42, 153



0, 7, 26



# Inverse Universe

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



180, 31, 88



235, 2, 91



31, 180, 48



89, 80, 84



153, 0, 58



26, 0, 10



# Previews

## White Background



This preview shows how the RYB color 31, 72, 180 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 31, 72, 180 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](#).



## **R Y B 31, 72, 180 Background**



This preview shows how black text looks on a background with the RYB color 31, 72, 180.



This preview shows how white text looks on a background with the RYB color 31, 72, 180.

# 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, 72, 180

**Protanopia**

31, 72, 180

**Deuteranopia**

0, 59, 161



**Tritanopia**  
0, 52, 108

# Trichromacy



**Original Color**

31, 72, 180

**Protanomaly**

31, 72, 180

**Deuteranomaly**

11, 64, 168

**Tritanomaly**

11, 61, 134

# Monochromacy



**Original Color**

31, 72, 180

**Achromatopsia**

81, 81, 81

**Achromatomaly**

63, 78, 117

# CSS Examples

## Text

The CSS property to change the color of the text to RYB 31, 72, 180 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(31, 88, 180)` looks like.

```
.text, #text, p{  
    color:rgb(31, 88, 180)  
}
```

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(31, 88, 180) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(31, 88, 180) }
```

## Border

The CSS property to change the border of an element to RYB 31, 72, 180 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(31, 88, 180) }
```

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

```
.border{ border-color:rgb(31, 88, 180) }
```

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

Here you see how a box with a 4 pixel `rgb(31, 88, 180)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(31, 88, 180); -webkit-box-  
shadow:4px 4px 4px 4px rgb(31, 88, 180);  
box-shadow:4px 4px 4px 4px rgb(31, 88,  
180) }
```

# Background

The CSS property to change the background color of an element to RYB 31, 72, 180 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(31, 88, 180) }
```

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

```
.background{ background-color: rgb(31, 88,  
180) }
```

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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