

# Converting Colors

XYZ(37.7235, 72.4632, 15.1318)

Have a look what the booklet for  
XYZ(37.7235, 72.4632, 15.1318)  
contains.

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# Color

**XYZ(37.7228, 72.4628,  
15.1305)**

# Conversions

## Conversions Part 1

Format	Color
Hex	33FF33
RGB	51, 255, 51
RGB Percent	20%, 100%, 20%
CMY	0.8000, 0.0000, 0.8000
CMYK	0.80, 0.00, 0.80, 0.00
HSL	120°, 100%, 60%
HSV	120°, 80%, 100%
XYZ	37.7228, 72.4628, 15.1305
YIQ	170.7480, -56.1000, -106.6920

# Conversions

## Conversions Part 2

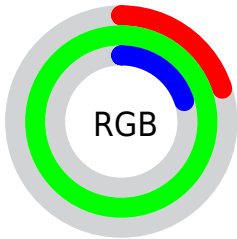
<b>Format</b>	<b>Color</b>
<b>RYB</b>	51, 255, 255
Decimal	3407667
CIELab	88.19, -81.65, 76.05
CIELCh	88, 111.582, 137.036
Yxy	72.4628, 0.3010, 0.5782
Android (android.graphics.Color)	4281597747 (0xFF33FF33)
YUV	170.7480, -59.0358, -105.0190
Hunter-Lab	85.1251, -69.8674, 49.0491

# Details

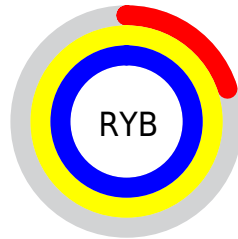
The XYZ color **37.7228, 72.4628, 15.1305** is a dark color, and the websafe version is hex **33FF33**. The color can be described as dark washed green. A complement of this color would be **60.4725, 30.8472, 97.3672**, and the grayscale version is **38.8899, 40.9152, 44.5567**.

A 20% lighter version of the original color is **48.4701, 77.7215, 28.3667**, and **19.7399, 39.4799, 6.5800** is the 20% darker color. If you saturate the color by 10%, you get **36.3544, 71.8055, 12.8927**, and if you desaturate by 10%, it is **40.1027, 73.6060, 19.0243**.

# Distribution



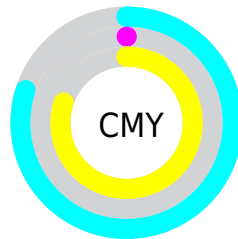
- Red (20%)
- Green (100%)
- Blue (20%)



- Red (20%)
- Yellow (100%)
- Blue (100%)



- Cyan (80%)
- Magenta (0%)
- Yellow (80%)
- Black (0%)




- Cyan (80%)
- Magenta (0%)
- Yellow (80%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 37.7228, 72.4628, 15.1305 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 37.7228, 72.4628, 15.1305 by changing the saturation by 10% instead.





 37.7228, 72.4628,  
15.1305


 37.7228, 72.4628,  
15.1305


327.7308,  
469.1508, 235.8227


 25.9439, 53.5368,  
8.7634


 70.9897, 122.7143,  
35.8275

 16.9141, 38.2315,  
4.4925


 93.2084, 154.8086,  
50.9944

 10.2682, 26.1624,  
1.8992


 119.6377,  
192.0611, 69.9318

 5.6408, 16.9452,  
0.4922

 150.6429,  
234.8562, 93.0580

 2.6665, 10.1954,  
0.0000

 186.5895,  
283.5784, 120.7916

 0.9799, 5.5287,  
0.0000

227.8428,

 0.0000, 2.5607,

338.6119, 153.5513

0.0000

274.7681,  
400.3413, 191.7554

■ 0.0000, 0.9069,  
0.0000

■ 0.0000, 0.0000,  
0.0000

■ 37.7228, 72.4628,  
15.1305

■ 37.7228, 72.4628,  
15.1305

■ 36.3544, 71.8055,  
12.8927

■ 40.1027, 73.6060,  
19.0243

■ 35.7601, 71.5200,  
11.9203

■ 43.6383, 75.3043,  
24.8076

■ 35.7601, 71.5200,  
11.9203

■ 48.4511, 77.6162,  
32.6800

■ 54.6473, 80.5925,  
42.8151

■ 62.3220, 84.2790,  
55.3683

■ 71.5617, 88.7173,  
70.4813

■ 82.4464, 93.9458,  
88.2849

95.0500, 100.0000,  
108.9000

# Harmonies

## Analogous

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



54.9015, 72.4628, 5.2846



37.7228, 72.4628, 15.1305



29.9810, 72.4628, 50.2995

# Triad

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



37.7228, 72.4628, 15.1305



57.9871, 72.4628, 326.4029



130.5411, 72.4628, 43.1883

# Complementary

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



37.7228, 72.4628, 15.1305



60.4725, 30.8472, 97.3672

# 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.



131.9926, 72.4628, 116.6917



37.7228, 72.4628, 15.1305



85.0355, 72.4628, 319.4837

# Square

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



37.7228, 72.4628, 15.1305



39.4762, 72.4628, 242.8040



113.6855, 72.4628, 227.5064



110.1204, 72.4628, 12.8043



# Rectangle

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



37.7228, 72.4628, 15.1305



29.4546, 72.4628, 98.3149



113.6855, 72.4628, 227.5064



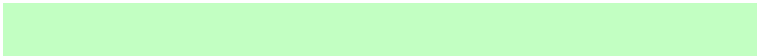
133.4199, 72.4628, 62.2252

# Sweetspot

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



37.7231, 72.4629, 15.1317



67.6723, 86.8491, 64.1196



77.5976, 93.0190, 16.9967



13.7898, 18.2555, 12.5877



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.



37.7231, 72.4629, 15.1317



35.9436, 71.6082, 12.2205



42.8751, 74.5238, 42.2620



17.7717, 20.1682, 19.1007



18.6854, 37.3708, 6.2287



1.8193, 3.6387, 0.6065



# Inverse Universe

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



60.4725, 30.8472, 97.3672



59.3990, 28.7008, 97.0080



48.1737, 25.9277, 32.6028



18.7927, 18.3004, 22.7916



30.9794, 14.8811, 50.6694

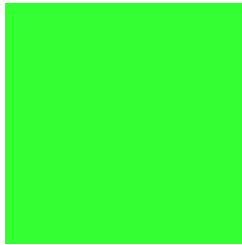


3.0164, 1.4489, 4.9336



# Previews

## White Background



This preview shows how the XYZ color 37.7228, 72.4628, 15.1305 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

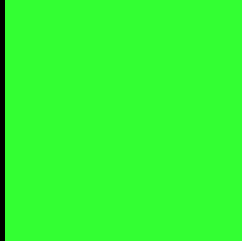
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 37.7228, 72.4628, 15.1305 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

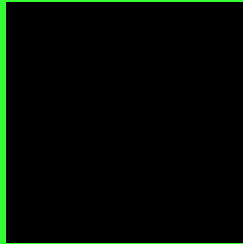
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

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

**XYZ 37.7228, 72.4628, 15.1305**

## **Background**



This preview shows how black text looks on a background with the XYZ color 37.7228, 72.4628, 15.1305.



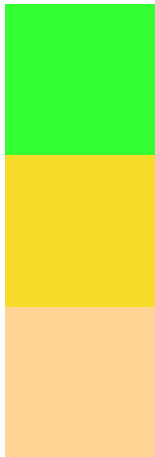
This preview shows how white text looks on a background with the XYZ color 37.7228, 72.4628,



# 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

37.7228, 72.4628, 15.1305

### Protanopia

63.7555, 70.4230, 12.4232

### Deuteranopia

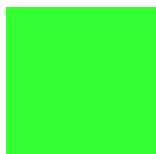
70.2083, 70.5169, 38.3445



## Tritanopia

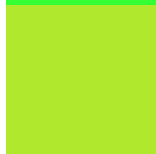
56.5026, 71.9993, 105.5270

# Trichromacy



## Original Color

37.7228, 72.4628, 15.1305



## Protanomaly

47.0095, 67.0166, 12.9405



## Deuteranomaly

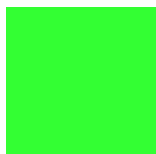
49.7801, 66.5028, 25.8354



## Tritanomaly

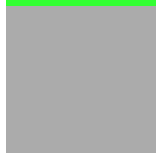
45.6209, 70.5790, 54.9347

# Monochromacy



## Original Color

37.7228, 72.4628, 15.1305



## Achromatopsia

38.7082, 40.7240, 44.3485



## Achromatomaly

33.7037, 48.2854, 27.6223

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 37.7228, 72.4628, 15.1305 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(51, 255, 51)` looks like.

```
.text, #text, p{  
    color:rgb(51, 255, 51)  
}
```

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(51, 255, 51) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(51, 255, 51) }
```

## Border

The CSS property to change the border of an element to XYZ 37.7228, 72.4628, 15.1305 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(51, 255, 51) }
```



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

```
.border{ border-color:rgb(51, 255, 51) }
```

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

Here you see how a box with a 4 pixel `rgb(51, 255, 51)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(51, 255, 51); -webkit-box-  
shadow:4px 4px 4px 4px rgb(51, 255, 51);  
box-shadow:4px 4px 4px 4px rgb(51, 255,  
51) }
```

# Background

The CSS property to change the background color of an element to XYZ 37.7228, 72.4628, 15.1305 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(51, 255, 51) }
```

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

```
.background{ background-color: rgb(51, 255,  
51) }
```

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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