

# Converting Colors

XYZ(42.2189, 23.2181, 2.2564)

Have a look what the booklet for  
XYZ(42.2189, 23.2181, 2.2564)  
contains.

<b>XYZ(42.2170, 23.2140, 2.2557)</b> .....	3
<b><i>Conversions</i></b> .....	4
<b><i>Details</i></b> .....	6
<b><i>Harmonies</i></b> .....	12
<b><i>Previews</i></b> .....	24
<b><i>Color Blindness Simulation</i></b> .....	28
<b><i>CSS Examples</i></b> .....	31

# Color

**XYZ(42.2170, 23.2140,  
2.2557)**

# Conversions

## Conversions Part 1

Format	Color
Hex	FF2E00
RGB	255, 46, 0
RGB Percent	100%, 18%, 0%
CMY	0.0000, 0.8195, 1.0000
CMYK	0.00, 0.82, 1.00, 0.00
HSL	11°, 100%, 50%
HSV	11°, 100%, 100%
XYZ	42.2170, 23.2140, 2.2557
YIQ	103.2470, 139.3300, 30.0020

# Conversions

## Conversions Part 2

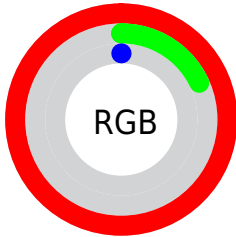
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	255, 56, 0
Decimal	16723456
CIE <sub>Lab</sub>	55.29, 74.20, 67.99
CIE <sub>LCh</sub>	55, 100.638, 42.499
Yxy	23.2140, 0.6237, 0.3430
Android (android.graphics.Color)	4294913536 (0xFFFF2E00)
YUV	103.2470, -50.9008, 133.0874
Hunter-Lab	48.1809, 72.0884, 30.9508

# Details

The XYZ color **42.2170, 23.2140, 2.2557** is a dark color, and the websafe version is hex **FF3300**. The color can be described as dark saturated red. A complement of this color would be **40.8458, 52.8118, 102.6478**, and the grayscale version is **13.0651, 13.7455, 14.9689**.

A 20% lighter version of the original color is **47.9874, 33.4072, 8.3339**, and **20.7390, 10.6914, 0.9706** is the 20% darker color. If you saturate the color by 10%, you get **42.2174, 23.2152, 2.2559**, and if you desaturate by 10%, it is **43.4229, 25.3369, 3.5503**.

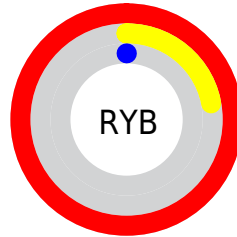
# Distribution



Red (100%)

Green (18%)

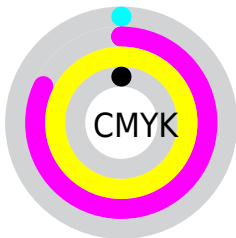
Blue (0%)



Red (100%)

Yellow (22%)

Blue (0%)

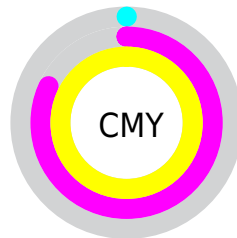


Cyan (0%)

Magenta (82%)

Yellow (100%)

Black (0%)



Cyan (0%)

Magenta (82%)


Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 42.2170, 23.2140, 2.2557 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 42.2170, 23.2140, 2.2557 by changing the saturation by 10% instead.





 42.2170, 23.2140,  
2.2557


 42.2170, 23.2140,  
2.2557


346.3580,  
268.8222, 126.2289


 29.4631, 14.7516,  
0.7062


 77.7910, 48.7445,  
9.7288


 19.5775, 8.6452,  
0.0000


 101.3419, 66.5813,  
16.5118


 12.1947, 4.5105,  
0.0000


 129.2224, 88.3118,  
25.8839

 6.9496, 1.9630,  
0.0000

 161.7980,  
114.3203, 38.2635

 3.4766, 0.5859,  
0.0000

 199.4340,  
144.9912, 54.0693


 1.4105, 0.0000,  
0.0000


 242.4958,


 0.2637, 0.0000,


180.7089, 73.7198


0.0000


 291.3487,  
221.8578, 97.6334


 0.0000, 0.0000,  
0.0000


 42.2170, 23.2140,  
2.2557


 42.2170, 23.2140,  
2.2557


 42.2174, 23.2152,  
2.2559

 43.4229, 25.3369,  
3.5503

 45.3120, 28.4483,  
6.2352

 48.0000, 32.6653,  
10.7047

 51.5694, 38.0818,  
17.2037

 56.0914, 44.7816,  
25.9383

61.6301, 52.8406,  
37.0893

68.2434, 62.3289,  
50.8185

75.9851, 73.3116,  
67.2742

84.9052, 85.8499,  
86.5929

# Harmonies

## Analogous

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



50.7164, 23.2140, 14.0802



42.2170, 23.2140, 2.2557



29.2465, 23.2140, 0.0000

# Triad

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



42.2170, 23.2140, 2.2557



7.1749, 23.2140, 10.8255



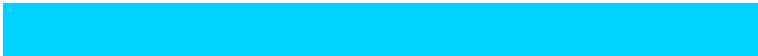
27.0961, 23.2140, 147.2477

# Complementary

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



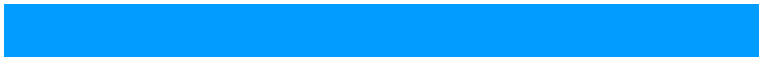
42.2170, 23.2140, 2.2557



40.8458, 52.8118, 102.6478

# 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.



16.1661, 23.2140, 142.7534



42.2170, 23.2140, 2.2557



6.9458, 23.2140, 41.2335

# Square

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



42.2170, 23.2140, 2.2557



10.4204, 23.2140, 1.5738



9.6299, 23.2140, 94.6947



40.1884, 23.2140, 104.2414



# Rectangle

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



42.2170, 23.2140, 2.2557



21.1325, 23.2140, 0.0000



9.6299, 23.2140, 94.6947



23.0229, 23.2140, 151.8677

# Sweetspot

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



42.2175, 23.2155, 2.2560



68.2430, 62.3280, 50.8169



53.1865, 26.0386, 64.8411



13.9812, 12.4463, 9.5686



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.



42.2175, 23.2155, 2.2560



42.2177, 23.2154, 2.2559



55.6145, 50.0095, 6.7217



18.2744, 18.5170, 18.7553



22.1356, 12.2825, 1.2041

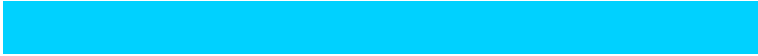


2.2237, 1.3327, 0.1400

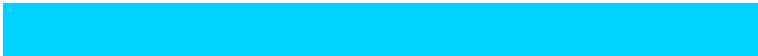


# Inverse Universe

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



40.8458, 52.8118, 102.6478



40.8460, 52.8120, 102.6487



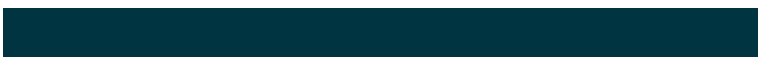
21.2985, 13.7173, 96.1321



18.2597, 19.8910, 23.1269



21.4439, 27.7974, 53.6698



2.1573, 2.8453, 5.2488



# Previews

## White Background



This preview shows how the XYZ color 42.2170, 23.2140, 2.2557 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

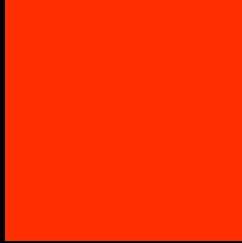
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 42.2170, 23.2140, 2.2557 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 42.2170, 23.2140, 2.2557**

## **Background**



This preview shows how black text looks on a background with the XYZ color 42.2170, 23.2140, 2.2557.



This preview shows how white text looks on a background with the XYZ color 42.2170, 23.2140,



# 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

42.2170, 23.2140, 2.2557

### Protanopia

21.0293, 23.2635, 4.6783

### Deuteranopia

23.3972, 23.1372, 3.2328



## Tritanopia

42.5586, 23.2285, 4.4310

# Trichromacy



## Original Color

42.2170, 23.2140, 2.2557

## Protanomaly

25.5190, 20.0492, 3.1867

## Deuteranomaly

27.8279, 20.6915, 2.5272

## Tritanomaly

42.3762, 23.2159, 3.2846

# Monochromacy



## Original Color

42.2170, 23.2140, 2.2557

## Achromatopsia

12.8919, 13.5633, 14.7705

## Achromatomaly

18.1012, 13.6970, 6.8440

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 42.2170, 23.2140, 2.2557 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(255, 46, 0)` looks like.

```
.text, #text, p{  
    color:rgb(255, 46, 0)  
}
```

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(255, 46, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(255, 46, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 42.2170, 23.2140, 2.2557 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(255, 46, 0) }
```



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

```
.border{ border-color:rgb(255, 46, 0) }
```

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

Here you see how a box with a 4 pixel `rgb(255, 46, 0)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(255, 46, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(255, 46, 0);  
box-shadow:4px 4px 4px 4px rgb(255, 46, 0)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 42.2170, 23.2140, 2.2557 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(255, 46, 0) }
```

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

```
.background{ background-color: rgb(255, 46,  
0) }
```

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](#).

Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

**@ConvertingColor**