

# Converting Colors

XYZ(13.2823, 19.3279, 20.3408)

Have a look what the booklet for  
XYZ(13.2823, 19.3279, 20.3408)  
contains.

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# Color

**XYZ(13.3091, 19.3380,  
20.4839)**

# Conversions

## Conversions Part 1

Format	Color
Hex	328777
RGB	50, 135, 119
RGB Percent	20%, 53%, 47%
CMY	0.8039, 0.4706, 0.5333
CMYK	0.63, 0.00, 0.12, 0.47
HSL	169°, 46%, 36%
HSV	169°, 63%, 53%
XYZ	13.3091, 19.3380, 20.4839
YIQ	107.7610, -45.5240, -22.9960

# Conversions

## Conversions Part 2

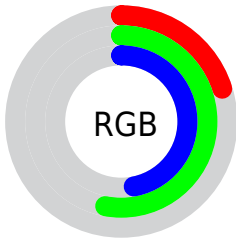
<b>Format</b>	<b>Color</b>
<b>RYB</b>	50, 97, 135
Decimal	3311479
CIELab	51.08, -29.50, 1.06
CIELCh	51, 29.517, 177.948
Yxy	19.3380, 0.2505, 0.3640
Android (android.graphics.Color)	4281501559 (0xFF328777)
YUV	107.7610, 5.5408, -50.6564
Hunter-Lab	43.9750, -22.9329, 3.1647

# Details

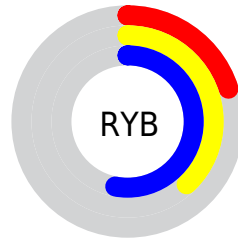
The XYZ color **13.3091, 19.3380, 20.4839** is a dark color, and the websafe version is hex **339999**. A complement of this color would be **12.1162, 7.8259, 6.0267**, and the grayscale version is **14.1815, 14.9201, 16.2479**.

A 20% lighter version of the original color is **31.4921, 42.3996, 45.0522**, and **4.3858, 6.9519, 7.0719** is the 20% darker color. If you saturate the color by 10%, you get **12.5887, 18.9845, 19.6644**, and if you desaturate by 10%, it is **14.2310, 19.7959, 21.3350**.

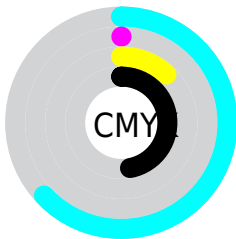
# Distribution



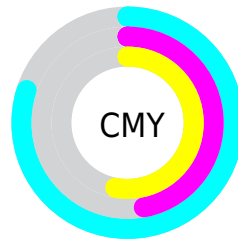
- Red (20%)
- Green (53%)
- Blue (47%)



- Red (20%)
- Yellow (38%)
- Blue (53%)



- Cyan (63%)
- Magenta (0%)
- Yellow (12%)
- Black (47%)



- Cyan (80%)
- Magenta (47%)
- Yellow (53%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 13.3091, 19.3380, 20.4839 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 13.3091, 19.3380, 20.4839 by changing the saturation by 10% instead.



■ 13.3091, 19.3380,  
20.4839

■ 13.3091, 19.3380,  
20.4839

206.4871,  
248.3084, 267.2132

■ 7.7202, 11.9148,  
12.5597

■ 31.4546, 42.3045,  
45.0966

■ 3.9667, 6.6857,  
6.9989

■ 44.7419, 58.6165,  
62.6222

■ 1.6833, 3.2663,  
3.3830

■ 61.3261, 78.6602,  
84.1853

■ 0.4458, 1.2723,  
1.2934

■ 81.5724, 102.8201,  
110.2045

■ 0.0000, 0.1196,  
0.0563

■ 105.8464,  
131.4804, 141.0984

■ 0.0000, 0.0000,  
0.0000

■ 134.5132,

165.0256, 177.2854

167.9383,  
203.8402, 219.1842

■ 13.3091, 19.3380,  
20.4839

■ 13.3091, 19.3380,  
20.4839

■ 12.5887, 18.9845,  
19.6644

■ 14.2310, 19.7959,  
21.3350

■ 12.0503, 18.7239,  
18.8741

■ 15.3685, 20.3639,  
22.2172

■ 11.6733, 18.5460,  
18.1124

■ 16.7362, 21.0502,  
23.1319

■ 11.4564, 18.4455,  
17.5911

■ 18.3471, 21.8613,  
24.0797

■ 20.2132, 22.8035,  
25.0614

■ 22.3454, 23.8824,  
26.0777

■ 24.7545, 25.1036,  
27.1292

■ 27.4502, 26.4720,  
28.2165

■ 30.4420, 27.9925,  
29.3403

# Harmonies

## Analogous

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



14.0100, 19.3380, 13.6069



13.3091, 19.3380, 20.4839



13.8426, 19.3380, 29.5512

# Triad

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



13.3091, 19.3380, 20.4839



21.1466, 19.3380, 38.7488



21.5322, 19.3380, 10.1344

# Complementary

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



13.3091, 19.3380, 20.4839



12.1162, 7.8259, 6.0267

# 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.



23.8147, 19.3380, 14.3679



13.3091, 19.3380, 20.4839



23.5760, 19.3380, 30.8221

# Square

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



13.3091, 19.3380, 20.4839



18.1794, 19.3380, 41.6253



24.5991, 19.3380, 21.6382



18.5825, 19.3380, 8.7046



# Rectangle

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



13.3091, 19.3380, 20.4839



14.8617, 19.3380, 35.4384



24.5991, 19.3380, 21.6382



22.4142, 19.3380, 11.2103

# Sweetspot

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



13.3097, 19.3388, 20.4844



33.9835, 39.7172, 43.7352



11.5550, 18.7523, 6.0284



7.6829, 9.1035, 10.0271



65.7814, 69.2071, 75.3665



9.5508, 10.0482, 10.9424



# Same Dimension

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



13.3097, 19.3388, 20.4844



22.0475, 33.7552, 34.5365



11.2112, 13.4723, 24.9321



4.7650, 5.2642, 5.7739



10.5684, 17.0102, 16.2444



0.0390, 0.0599, 0.0689



# Inverse Universe

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



12.1162, 7.8259, 6.0267



19.7545, 11.3065, 6.5147



13.1181, 10.4819, 4.3496



4.7058, 4.7020, 5.0629



9.3835, 4.8178, 1.3260

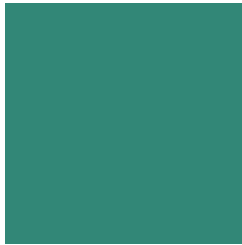


0.0345, 0.0175, 0.0153



# Previews

## White Background



This preview shows how the XYZ color 13.3091, 19.3380, 20.4839 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 13.3091, 19.3380, 20.4839 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 13.3091, 19.3380, 20.4839**

## **Background**



This preview shows how black text looks on a background with the XYZ color 13.3091, 19.3380, 20.4839.



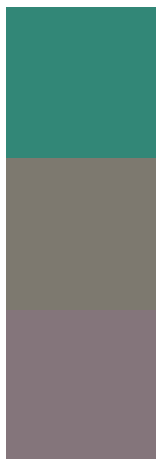
This preview shows how white text looks on a background with the XYZ color 13.3091, 19.3380,



# 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

13.3091, 19.3380, 20.4839

### Protanopia

18.1641, 19.1824, 17.7842

### Deuteranopia

19.4522, 19.0582, 21.3922



## Tritanopia

14.9972, 19.4162, 28.5484

# Trichromacy



## Original Color

13.3091, 19.3380, 20.4839

## Protanomaly

15.5351, 18.7333, 18.7167

## Deuteranomaly

16.2000, 18.6452, 21.1574

## Tritanomaly

14.3215, 19.3370, 25.5319

# Monochromacy



## Original Color

13.3091, 19.3380, 20.4839

## Achromatopsia

14.2537, 14.9960, 16.3306

## Achromatomaly

13.3335, 16.1530, 17.7443

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 13.3091, 19.3380, 20.4839 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(50, 135, 119)` looks like.

```
.text, #text, p{  
    color:rgb(50, 135, 119)  
}
```

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(50, 135, 119) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(50, 135, 119) }
```

## Border

The CSS property to change the border of an element to XYZ 13.3091, 19.3380, 20.4839 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(50, 135, 119) }
```



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

```
.border{ border-color:rgb(50, 135, 119) }
```

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

Here you see how a box with a 4 pixel `rgb(50, 135, 119)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(50, 135, 119); -webkit-box-  
shadow:4px 4px 4px 4px rgb(50, 135, 119);  
box-shadow:4px 4px 4px 4px rgb(50, 135,  
119) }
```

# Background

The CSS property to change the background color of an element to XYZ 13.3091, 19.3380, 20.4839 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(50, 135, 119) }
```

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

```
.background{ background-color: rgb(50, 135,  
119) }
```

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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