Color Models

RGB

This color model sets a color via three comma-separated values. The first value sets how much red will be in your color, the second sets how much green, and the third sets how much blue. The model can use either percentages or decimal values.

Percentages: 0%–100%

```
Examples
color: rgb(100%,0%,50%);
background-color: rgb(0%,50%,50%);
```

Decimal: 0–255.

```
Examples
color: rgb(255,0,127);
background-color: rgb(151,0,204);
```

RGBA

The "A" at the end of RGB stands for alpha, which allows you to set a color's opacity. The opacity values can be any number from zero to one. A value of zero sets no opacity or transparent. A value of one creates a fully opaque color. To get values between zero and one set them in decimal points. For instance, a color set to 50% opacity would have an alpha value of point 5, written as ".5". And 75% opacity would have an alpha value of ".75".

```
Example with an alpha value of 50% opacity:
color:  rgba(255,0,127,.5);
```

HSL

This model is also an RGB model that allows you to set you color by its hue, saturation, and lightness. The hue is a degree value on the color wheel from 0 degrees to 360 degrees. Saturation is a value from 0% to 100%, where 0% is no saturation (gray) and 100% is full saturation. Lightness is also a value from 0% to 100%, where 0% is black and 100% is white.

Common Hue settings

0 or 360 degrees = Red
60 degrees = Yellow
120 degrees = Green
180 degrees = Cyan
240 degrees = Blue

```
Example
Background-color: hsl(240,80,50);
```

HSLA

This is an extension of the HSL color model that allows you to enter a fourth value for opacity.

```
Example
color: hsla(180,80,50,.5);
```

Hexadecimal: 00–FF

This is also an RGB model that use base 16 to set color value's in a six-digit number. The first pair of digits is the red value, the 2nd pair of digits is the green value, and the last pair of digits is the blue value. This model is the quickest to code and is often used by web color mixers. Unfortunately, because it uses base 16 numbers it can be difficult to comprehend.

```
Example
color: #F90A7F;
```

Opacity in hexadecimal colors

Traditionally the hexadecimal system only produced completely opaque colors. Recently CSS Color Module Level 4 introduced an eight-digit hexadecimal notation. Its two extra digits, which are added to the end of a number, are used for setting a color's opacity. As with each RGB channel's digits within a hexadecimal number, the Opacity channel will support any value from 00 – FF. The 00 value will produce a color that is completely transparent, while FF will produce a color that is completely opaque. Any value between 00 and FF will produce a translucent color. See example below:

```
color: #F90A7F9C;
```

The last 2 digits —'9C'— in the above number define the color's level of opacity. Remember: because the hexadecimal system uses the base-sixteen numeric system, its numeric values will seem strange. So you may wish to use the RGBA or HSLA color models when you want a color that is not fully opaque.