

Decorating with CSS

Cool Ways to Make Things Pretty

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Notes & URLs for this presentation can be found...

- » underneath the link to this slide on granneman.com
- » at files.granneman.com/presentations/webdev/CSS-Decorating-with-CSS.txt

Backgrounds

Backgrounds are complex

Lots of properties

Can be *layered*: multiple background layers

Difficult concepts

background-image
background-position
background-size
background-repeat
background-attachment
background-origin
background-clip
background-color

background

background-clip

Specifies whether an *element's background extends* to the outer edge of the content, padding, or border of the box model

Values

- » **border-box** (default)
- » **padding-box**
- » **content-box**



background-clip

9

3

1

4

4.1

6.1

content-box

9

3

1

4

4.1

6.1

background-color

Sets the *background color* of an element using <color>

background-image

Sets 1 or more background images for an element
using `<image>` data type

```
background-image: url(http://www.foo.com/  
bar.png)
```

```
background-image: url(data:image/gif;base64,  
R0lGODlhEAAQAMQAAORHHOVSKu...)
```

```
background-image: linear-gradient(180deg, red,  
blue)
```

<image>

A 2D image, either static or dynamically generated

2 kinds of <image>s in CSS

- » *static*: referenced via a <url> or included via a data URL
- » *dynamically-generated*: e.g., <gradient> (covered later)

<url>

Pointer to a web resource

Expressed in 2 ways:

- » absolute or relative URL
- » data URL

Absolute	<code>http://baz.com/foo.png</code>	Complete URL
Site root- relative	<code>/foo.htm</code> <code>/bar/foo.png</code>	Web server fills in protocol & domain
Document -relative	<code>foo.png</code>	Same directory
	<code>bar/foo.png</code>	Down into sub-directory
	<code>../bar/foo.png</code>	Up into parent directory

Data URL

Resource inlining: instead of referencing an external image (via an absolute or relative URL), you instead embed the images directly into the style sheet

```
background-image: url(data:image/gif;base64,  
R0lGODlhEAAQAMQAAORHHOVSKu...)
```

Why? To save HTTP requests to the web server

The downside: it makes your style sheets bigger



data:image/gif;base64,R0lGODlhMAAwAPf/APbVbfbQcv769vjek/rqtumVI++tWvnkofC0ZvTKZem4l/LBQt3d3deVc9WOZ/nhmeqaJfzxyvjciPPz8/358fbWgezJtuymLv79/frmpNVsEsNcKfTQW/PMqOmVHfTNbO2kSky9LS0u2tNvXh1Nt4Fu7u7vbYgvHx8frorPG6PfG7Me6wLf301fTNUtir1vj4+NeHVvnmquWJGeugJOB8F+qSMvPFX/G9ReykIu+5Zf766uqaHvrkneqdi+uZNuzs7PG7dPnhnfX19erq6v312NXV1fLBTeiLG+ymPvXVtdhzFNl2JeSYVe2rNMrKyvrrvdJmEvfaJougIOOGGfrqu8JQEuyiP+uhKPvt3fbTdf323e+1Nfvs1fniwe2lJOubIsRSD+mTHPnevvnogfjdj/fp4vT09Pvp1efn5+Tk5PTJTuli4vz38vbUeeWGItnZ2fvo0Pngvs5gEfjhl+bm5u2uL+Dg4Nvb2/vsuueGGOiQHfzy0f316eGDGPzuweylLcxeEfbUgeucJMNWHOqbIPvsv/bTY//9+vfxcumXH+iYHvjdjP317P305fvz7u2rMuynL/rps+yeQfjJjeeVHe6pMu+yMe6tJ/ror/njpffadPCyL+mYJOqZIdZvE+2nI+2pJPbUe+yiIeuch+qYHfjbh+6sJPbYgfvqsfv7++ukK/TNa+mQG+60POGtkuuiIdR5RPzwx8pcD83NzfTLj+yjJu6vJe2vTvbPnt2hgvjej/TKlvLFfv3y5/334u6xOPjdlvLYyfTNbvrpsfvqsvjdwvzyzvPd0fC4N+vp5/fUdOmZKuykLOKhd/HSu/bavfngoPXRePbRftuRYOCNRvH0tvbRc/fZe+Szm/TMWPG0OPfXeeiLKspiJdF0O+qdMOJ/G9LBueSCHvTHXfLCWOnn5fHFnvrvw6868tPbPcfjn2vrn08dcHPbQcN+IPumRIOqRHuqSH/TIYu/AleqqNeOogOu9n8hWD++3OPG/eu+0M/nkmOaKKe6pM////yH5BAEAAAP8ALAAAAAAwADAAAj/AP8JHEiwoEGBjhwdXMiwocN/vXo9nEjRYBcnTrpU3DhRxwIcOjiKXOjFDh1GkLyMXCkQEa4lRVocwYWB5cgKdjJQoMDPTgWbHCkk0bZlx44WLpIIAFqx1qUUR4vsyMCiFtOJjsAdKrIlQoQtLTjU63PVYRAuqX5FkCUrwi8yl/SVZdgFC4AifAzpNcSnxSFmGucaNJCmwJE8eQgQQFwkRTIEggvKsbWJz59UmFMVK/bnGABbciJjiFPhigpiEVKoXq06tYorFdDUXCkgRK4gIOAN+rICW4RUGYILD55K1qYVXYDAAXEkV4ilDfuM4YVgEjwwXzgtcAGA0oHFPcKL/x8PhcABSgBcLOD0BQy8SQh4eWk0cIyBH/Kw79ueqMyBTFBAUQUBKfTwwAN0JEjHgQj2kAkBAVaRwnmJqHdJe/H8gMAYAoCQwxoAMNKDDIpJMqEQA+yySxkstujii2UE00MGKUiiimAwPMALAGjkYsBQFk0TCTQo4DsCIBKYkaYoE SCq5JJNJQgnlk0wyMsADRC4TCQgUDNTID5a4oUkwJ5SJCiplmnkmmmm2meazbp4QjCzaWDIJfQT5YoMTWkQjhSiAiuKGG4EGSiiggyJaqKCBShHNNZbY4MtBWXTjxDXBCHLNppx2ek0AmwYgqqekChKMO/7YkAVD7LzhhDpSSP/zway01srKrKzkemuttUojxQf+9IOGQyGMY8k8ggyTwLLMNuvss8wOMw05kYwTwkTQhAPLLVzkowIOR5Rzw7jkl1tuOUfgoAIXl9wyRTjGVKREdbCcYu+9p2DCwr4sbMMFvyxggu+9U9SgBEcdzABLKAw37PDDEDcMCxUdjEQPFaBkrPHGHHesMRXnsNREJTmUbPLJKKecQyVN2PTOIqPELPPMNNc8igfv2MREIVP07PPPQAc9BQ9MsNSGBqQkrfTSTDetdBSIrESCBjz4wMPVWGetddaFWK3BoitZ80khNPBQytlon2122mmTzcMnz6ykwBKeYKGI B3jnrYgPWGD/McgieeuNhSef3LOSMYWasYoYjDNe9yqrDOID5IM3LoYHq4BRgj0rxVADFoC0IronzURywSbi+OGHGINcEEkznYjeygVY1EDNSt/4cUEze0AAiROWQLBHCXPEEsscJfT+e/B7XHCBH7Gs1M4MI1QPjBMQILHELDEII5AwMcyBBIQOAFM9SNQ4c1Ij4SBhCuuJNDJDBpY4QAJBpHggBWfzNDJCPBDghWgsxFk4AMeIyiAH6JghQaYoSFmaIAVouCHAoxgD/jAH0cseAg91CAKhNDFIyiCDl0QIgo10MMsLCCSV8whEBt4RRtE0oZXbGAOc8hGQzCgChjAYAhnmAAKjRywgRcowwRIRMEehjAEHzqRiUJEIhCIQEVzvGADDUCBEpsIA1XUpIdCBEIa1MAAPIjDCCJIowiMgIc7qIEISiwjEdLABgbAQQS0eIIen0ALEaQDDgxgQx2AoMQu8hAGYSSCGthwBwY4Eg+OZEMA4KjECVjSBGJcPB2NwEkjwAGQbkWDEEwwAUNGZiQBAQA7

base64

Encodes binary file into text

Convert any image format: JPEG, GIF, PNG, SVG

On Mac OS X & Linux

```
$ base64 star.gif
```

On Windows

```
Base64.exe -e star.gif
```

(see support.microsoft.com/kb/191239)

[address, find IP address of a domain name](#)

[Convert IP address to different formats](#)

[Convert Unicode characters to HTML code numbers and vice versa](#)

[Convert Unicode characters to Unicode escape sequences and vice versa](#)

[Coordinate converter and show map](#)

[Create self-signed SSL certificates online](#)

[CSV to XML converter](#)

[CVS pserver password decoder and encoder](#)

[Decode Certificate Signing Request \(CSR\)](#)

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[Favicon generator](#)

[Find the BIC numbers for Dutch IBAN numbers](#)

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[Free game textures](#)

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[Free online SEPA XMI](#)

Input base64 encoder and decoder:

Enter source data *:



-- Or --

Upload source file *:
Max 100 KB.



Choose File no file selected

Conversion method *:



Encode to Base64 string

Select output *:



Output in textbox

Max characters per line *:



75 Allowed values 0 - 999. Use 0 for unlimited characters.

To prevent automated submissions an Access Code has been implemented for this tool.

jH8

Please enter the Access Code as displayed above*:

*** = required**

Convert

Clear

Output base64 encoder and decoder:

Select all

Clear

[address, find IP address of a domain name](#)

[Convert IP address to different formats](#)

[Convert Unicode characters to HTML code numbers and vice versa](#)

[Convert Unicode characters to Unicode escape sequences and vice versa](#)

[Coordinate converter and show map](#)

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[Decode SSL certificate](#)

[Electronic business card vCard generator](#)

[European clothing standard EN 13402 pictogram generator](#)

[Favicon generator](#)

[Find the BIC numbers for Dutch IBAN numbers](#)

Input base64 encoder and decoder:

Enter source data *:



-- Or --

Upload source file *:
Max 100 KB.



Choose File no file selected

Conversion method *:



Encode to Base64 string

Select output *:



Output in textbox

Max characters per line *:



75 Allowed values 0 - 999. Use 0 for unlimited characters.

To prevent automated submissions an Access Code has been implemented for this tool.

jH8

Please enter the Access Code as displayed above*:

*** = required**

Convert

Clear

Output base64 encoder and decoder:

www.mobilefish.com/services/base64/base64.php



ios

background-image

4

1

1

1

Y

Y

Multiple backgrounds

9

1.3

1

3.6

2.3

6.1

Gradients

10

4*

1*

3.6*

Y*

Y*

SVG

9

5

8

4

4.1

6.1

* Requires vendor prefix

background-origin

Specifies whether the content, padding, or border of the box model is used for *background image positioning*

Values

- » border-box
- » padding-box (default)
- » content-box



background-origin

9

3

1

4

4.1

6.1

content-box

9

3

1

4

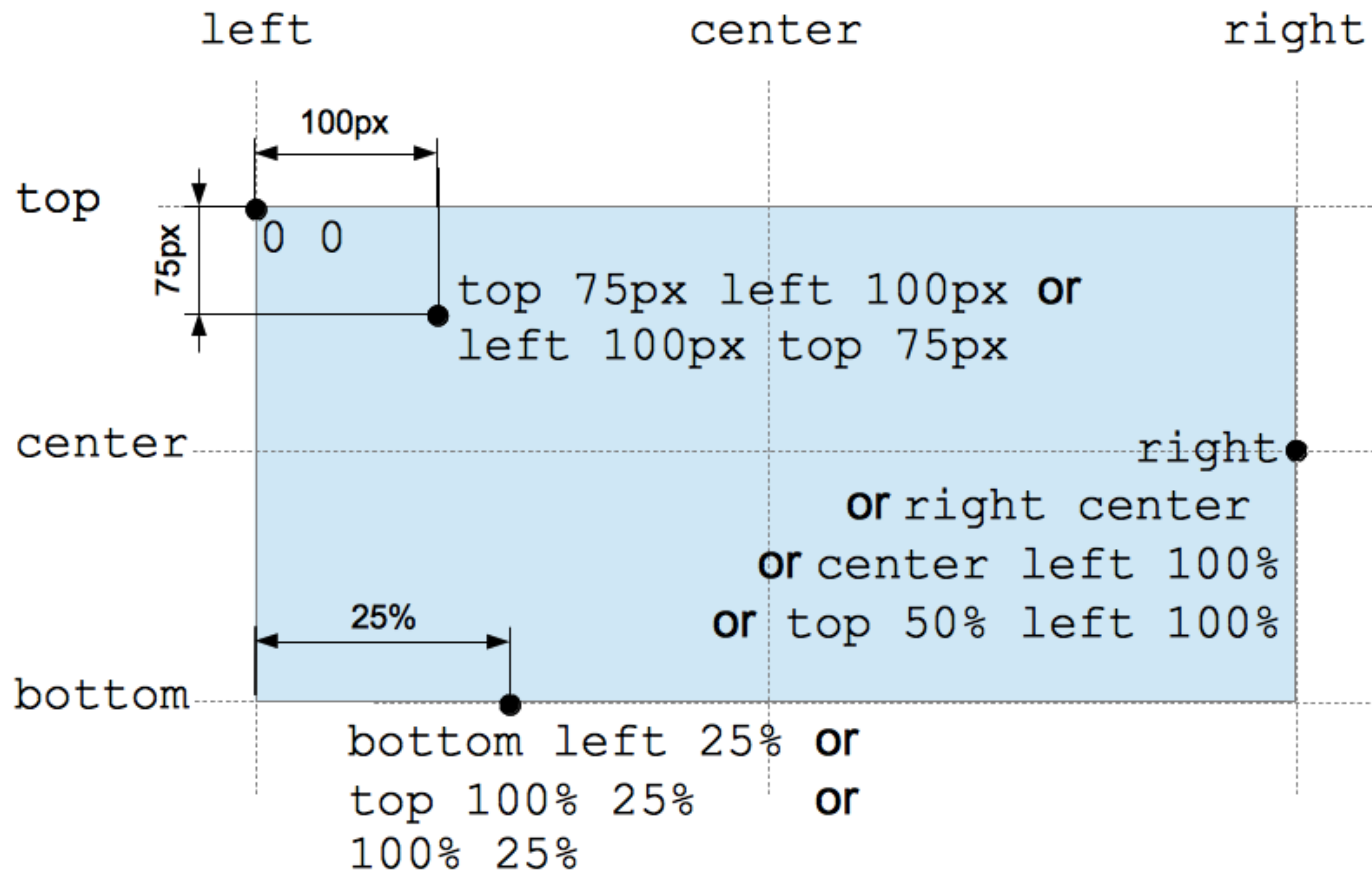
4.1

6.1

`background-position`

Determines how a background image is *positioned*

Uses the `<position>` data type





background-position

4

1

1

1

Y

Y

Multiple backgrounds

9

1.3

1

3.6

2.3

6.1

4-value syntax

9

>7

25

13

—

—

background-size

How much the background image is *resized*, if at all

Values

- » **cover**: fills entire box with image
- » **contain**: resizes image to fit in box
- » **<percentage>** (of the size of the box)
- » **<length>**
- » **auto**: don't resize image (default)

`<percentage>`, `<length>`, & `auto` can be specified 1 or 2 times as a value

If you specify 2 values, 1st is used for width & 2nd for height

If you specify only 1 value, it is used for width & the height is implicitly set to `auto`



background-size

9

4.1

3

4

2.3

5.1

contain & cover

9

4.1

3

3.6

—

—

SVG

?

?

?

8

?

?

background-repeat

Specifies if & how background images are *repeated*

Values

- » **repeat**: repeat in both directions (default)
- » **repeat-x**: repeat horizontally
- » **repeat-y**: repeat vertically
- » **no-repeat**: do not repeat



background-repeat

4

1

1

1

?

?

Multiple
backgrounds

9

1.3

1

3.6

?

?

background-attachment

Specifies if & how background images *scroll*

Values

- » **scroll**: scrolls with the page (default)
- » **fixed**: fixed within the viewport & does not scroll
- » **local**: scrolls with the content of its container



background-
attachment

4

1

1

1

2.1

3.2

Multiple
backgrounds

9

1.3

1

3.6

2.1

3.2

local

9

5

4

25

?

?

background

Shorthand for combining other background properties

background: background-image background-
position/background-size background-repeat
background-attachment background-origin
background-clip background-color

⚙ HTML

⚙ CSS

1

div {

2

background:

3

url(http://placeholder.it/150)

/* background-image */

4

20px 20px / auto auto

/* background-position /

background-size */

5

no-repeat

/* background-repeat */

6

scroll

/* background-attachment */

7

padding-box border-box

/* background-origin

background-clip */

8

indigo

/* background-color */

9

}

10

11

/* Default background values */

12

13

{

14

background:

15

none

/* background-image */

16

0% 0% / auto auto

/* background-position

background-size */

17

repeat

/* background-repeat */

18

scroll

/* background-attachment */

19

padding-box border-box

/* background-origin background-

clip */

20

transparent

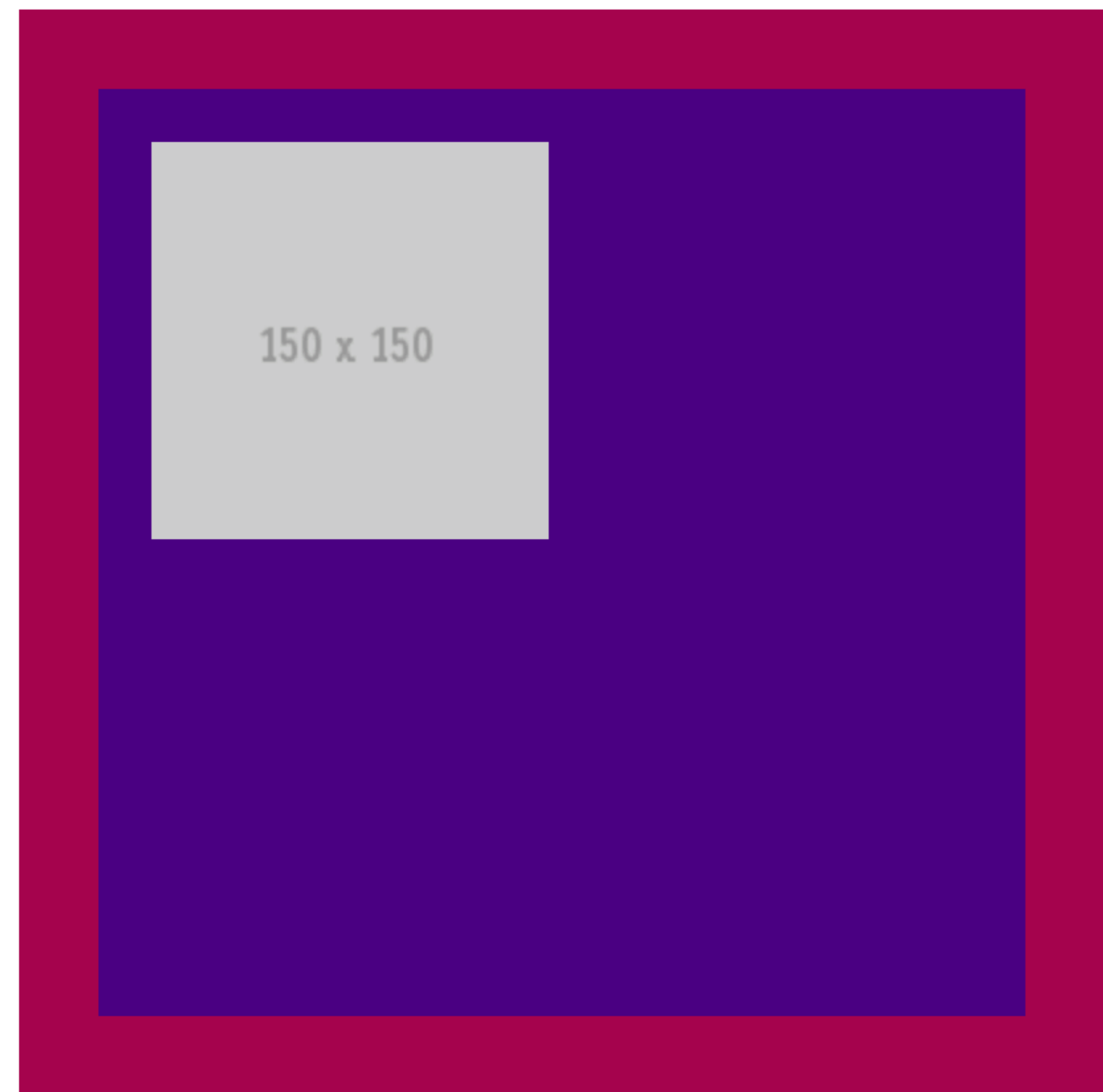
/* background-color */

21

}

22

⚙ JS



Background Layers

Every background layer can have every background property except `background-color`

Only the bottom layer can use `background-color`

Background layers do not have a `z-index` property

They stack in the order they appear in the style sheet

1st background layer in CSS is rendered as top layer in the browser

Last background layer in CSS is rendered as bottom layer in the browser

Gradients

CSS gradients use the `<gradient>` data type

<gradient>

A CSS <image> made from a *progressive transition* between 2 or more colors

2 types of gradients

- » *linear*: progresses in a single direction
- » *radial*: radiates outward from a point

Both can repeat

Linear

Radial



						
<code>linear-gradient*</code>	10	>7	26	10	2.3 (-webkit) 4.4	6.1 (-webkit) 7.1
<code>radial-gradient*</code>	10	7	25	10	2.3 (-webkit) 4.4	6.1 (-webkit) 7.1

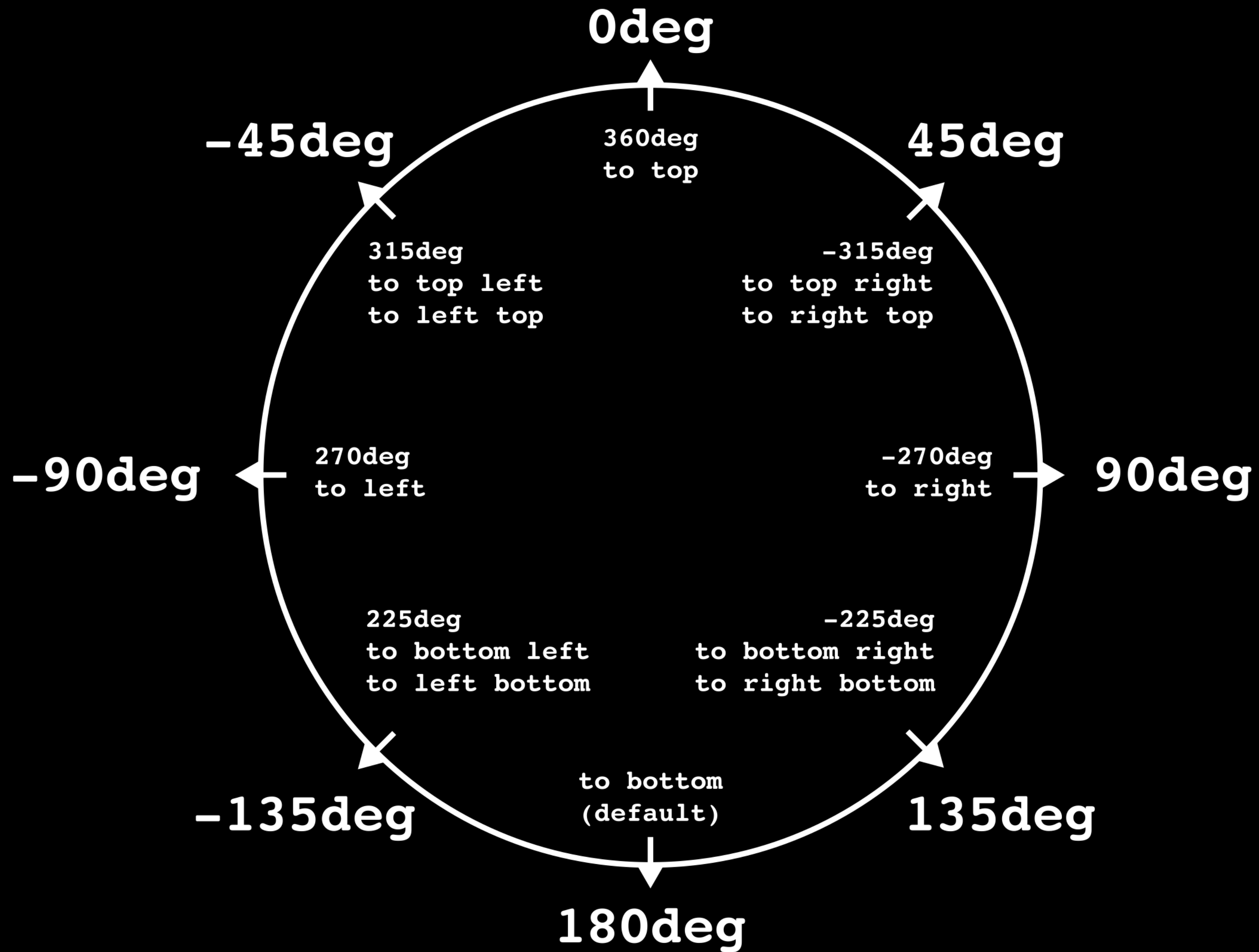
* Using correct finalized syntax

Linear

```
linear-gradient(45deg, red, blue)
```

Function that defines a linear gradient: *<angle>*
followed by two or more color stops

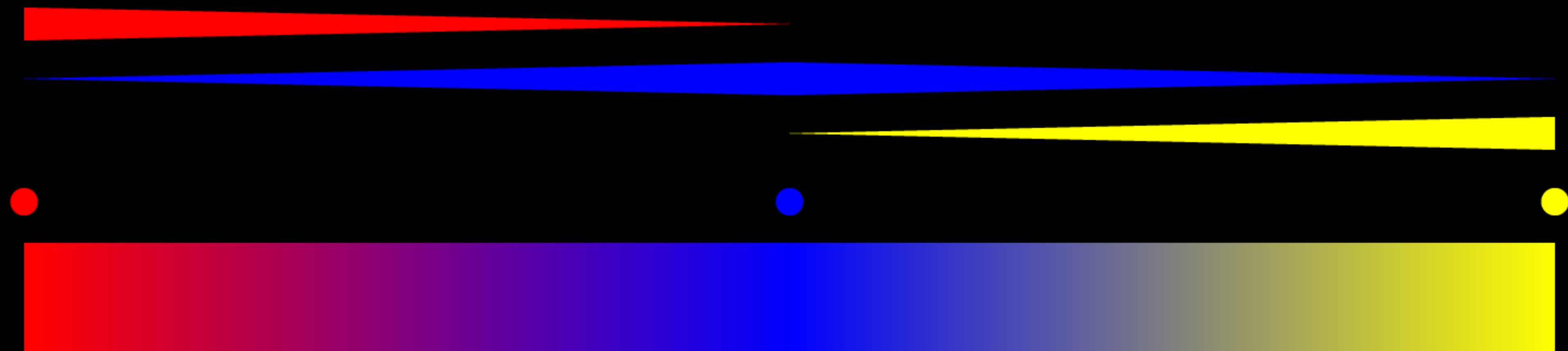
Color stops mark the point at which a gradient changes
from one color to the next





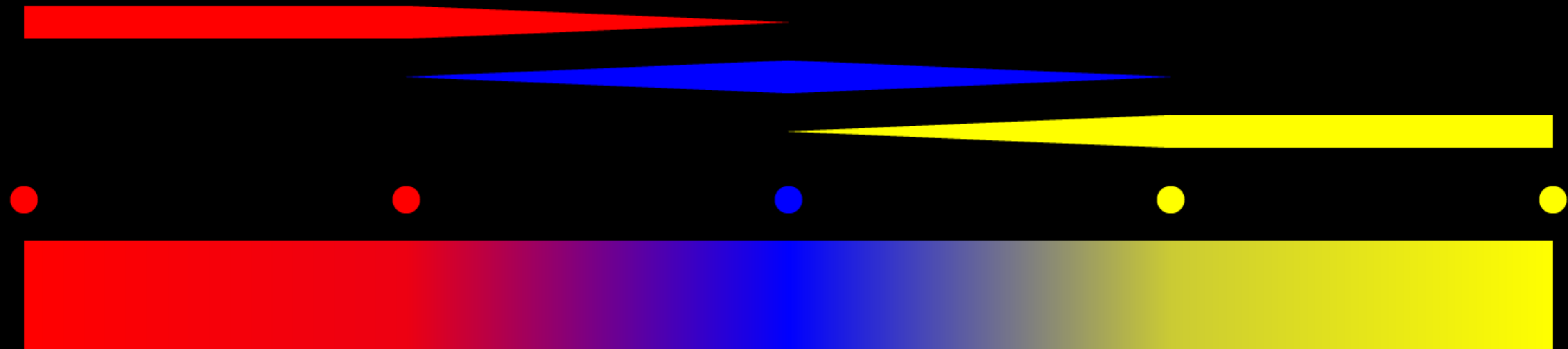
```
linear-gradient(90deg, red, yellow)
```

```
linear-gradient(90deg, red 0%, yellow 100%)
```



```
linear-gradient(90deg, red, blue, yellow)
```

```
linear-gradient(90deg, red 0%, blue 50%,  
yellow 100%)
```



```
linear-gradient(90deg, red 25%, blue, yellow  
75%)
```

```
linear-gradient(90deg, red 0%, red 25%, blue  
50%, yellow 75%, yellow 100%)
```

```
linear-gradient(90deg, red, red, blue, yellow,  
yellow)
```



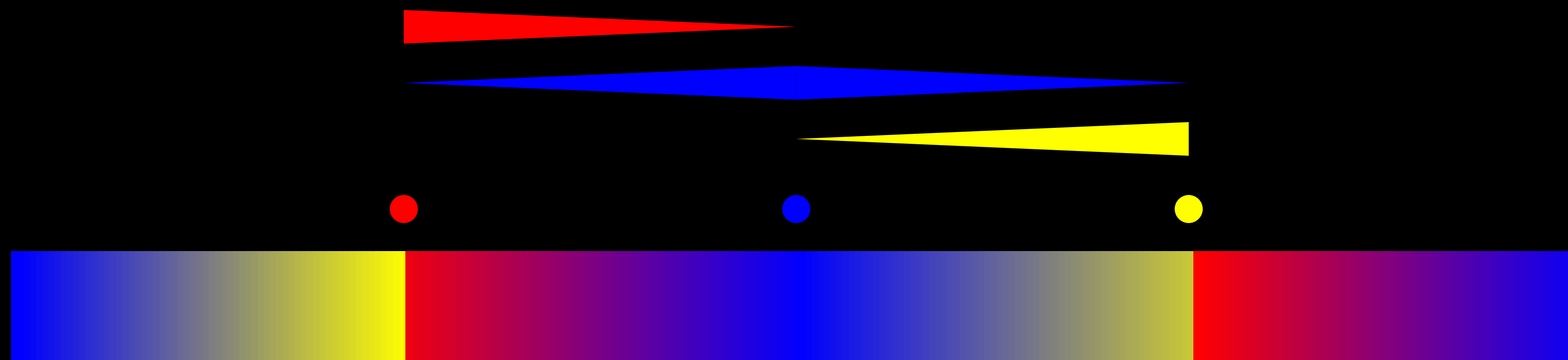
```
linear-gradient(90deg, red 25%, blue 25%, blue  
75%, yellow 75%)
```

```
linear-gradient(90deg, red 0%, red 25%, blue  
25%, blue 75%, yellow 75%, yellow 100%)
```

Function that defines a *repeating linear gradient*:
<angle> followed by two or more color stops

```
repeating-linear-gradient(45deg, red 25%, blue 75%)
```

Difference from non-repeating: color stops don't have to start & end at the edges of the containing block



```
repeating-linear-gradient(90deg, red 25%,  
blue, yellow 75%)
```

```
repeating-linear-gradient(90deg, red 0%, red  
25%, blue 50%, yellow 75%, yellow 100%)
```

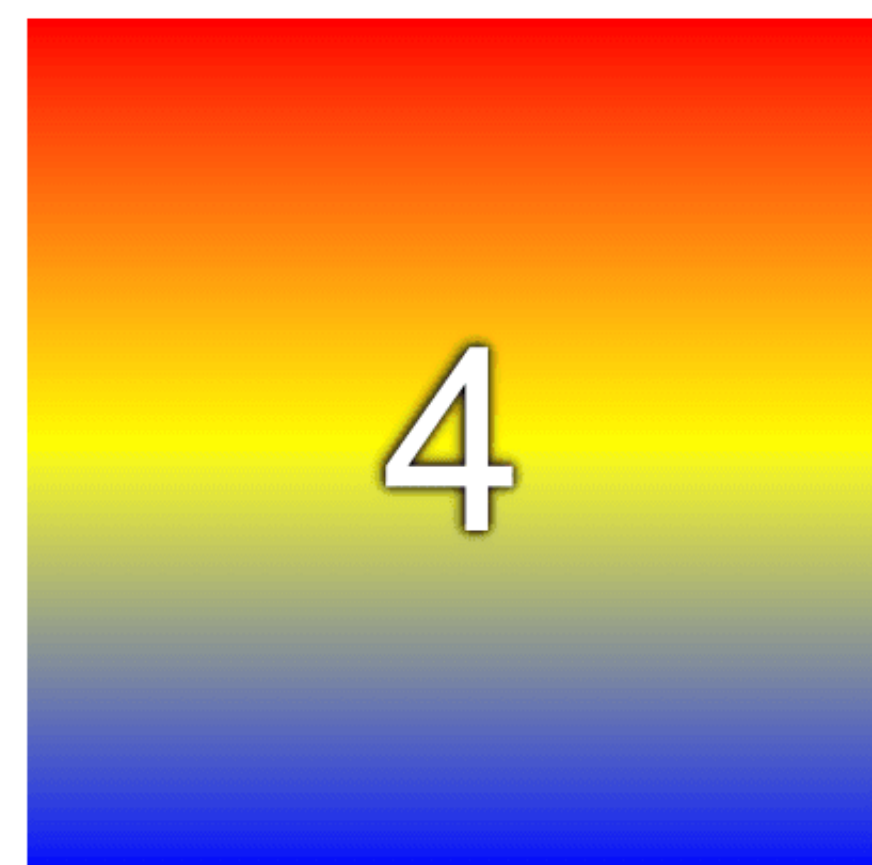
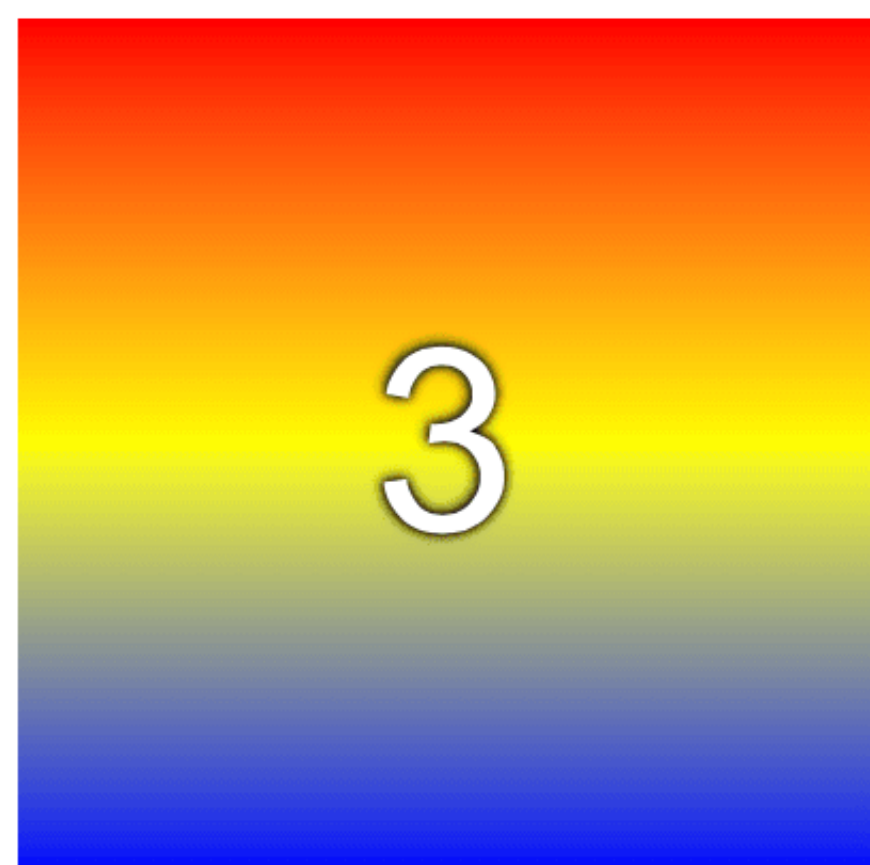
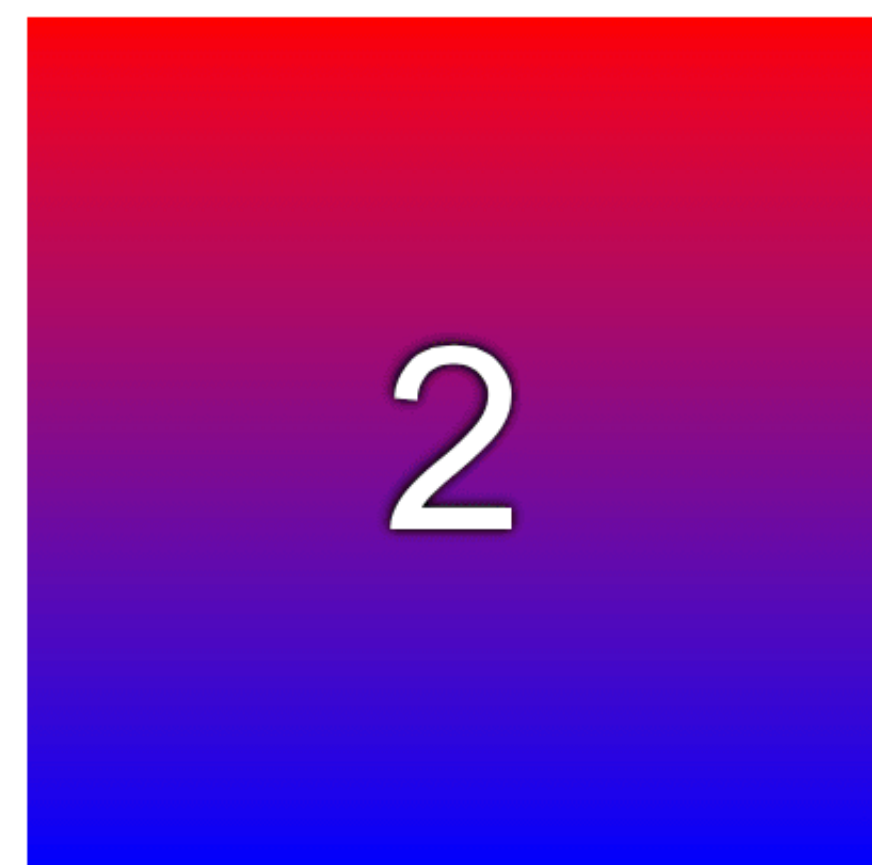
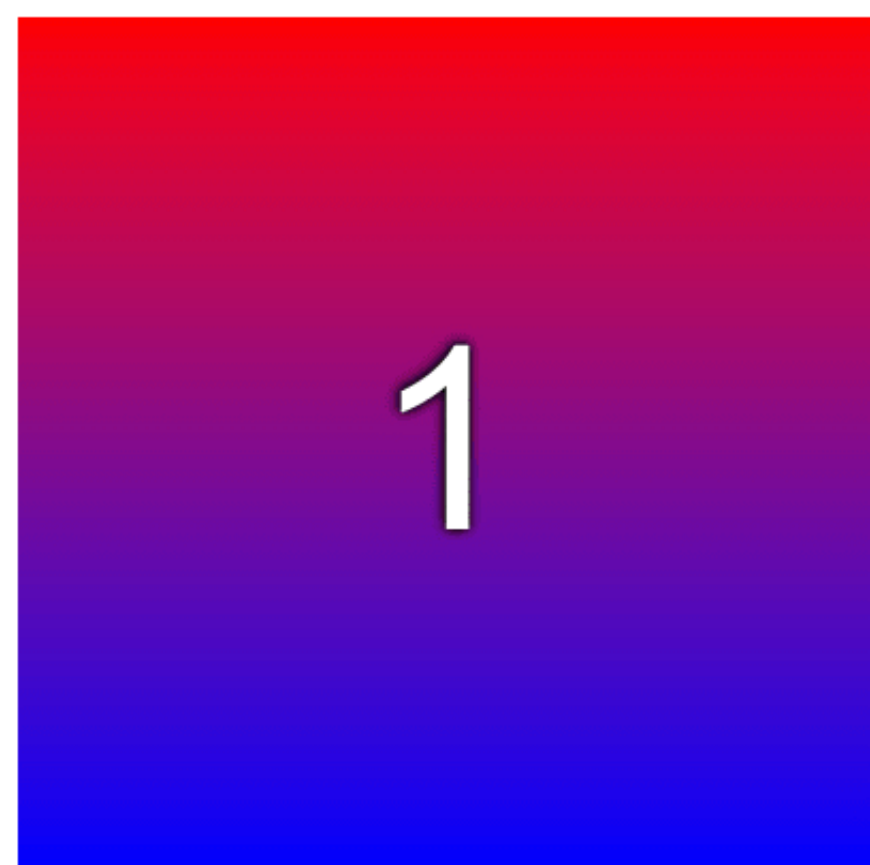
HTML

```
1 <div>1</div>
2 <div>2</div>
3 <div>3</div>
4 <div>4</div>
5 <div>5</div>
6 <div>6</div>
7 <div>7</div>
```

CSS

```
1 /* The basics, two color stops */
2
3 div:nth-of-type(1) {
4   background-image: linear-
5   gradient(red, blue);
6 }
7
8 /* Verbose, but same as first */
9
10 div:nth-of-type(2) {
11   background-image: linear-
12   gradient(180deg, red 0%, blue 100%);
```

JS



Radial

A radial gradient is created in 4 steps:

- » choose between *circle* or *ellipse* for the shape
- » pick the *center point* of the gradient using the `<position>` data type
- » define where the gradient should *end*
- » set two or more *color stops*

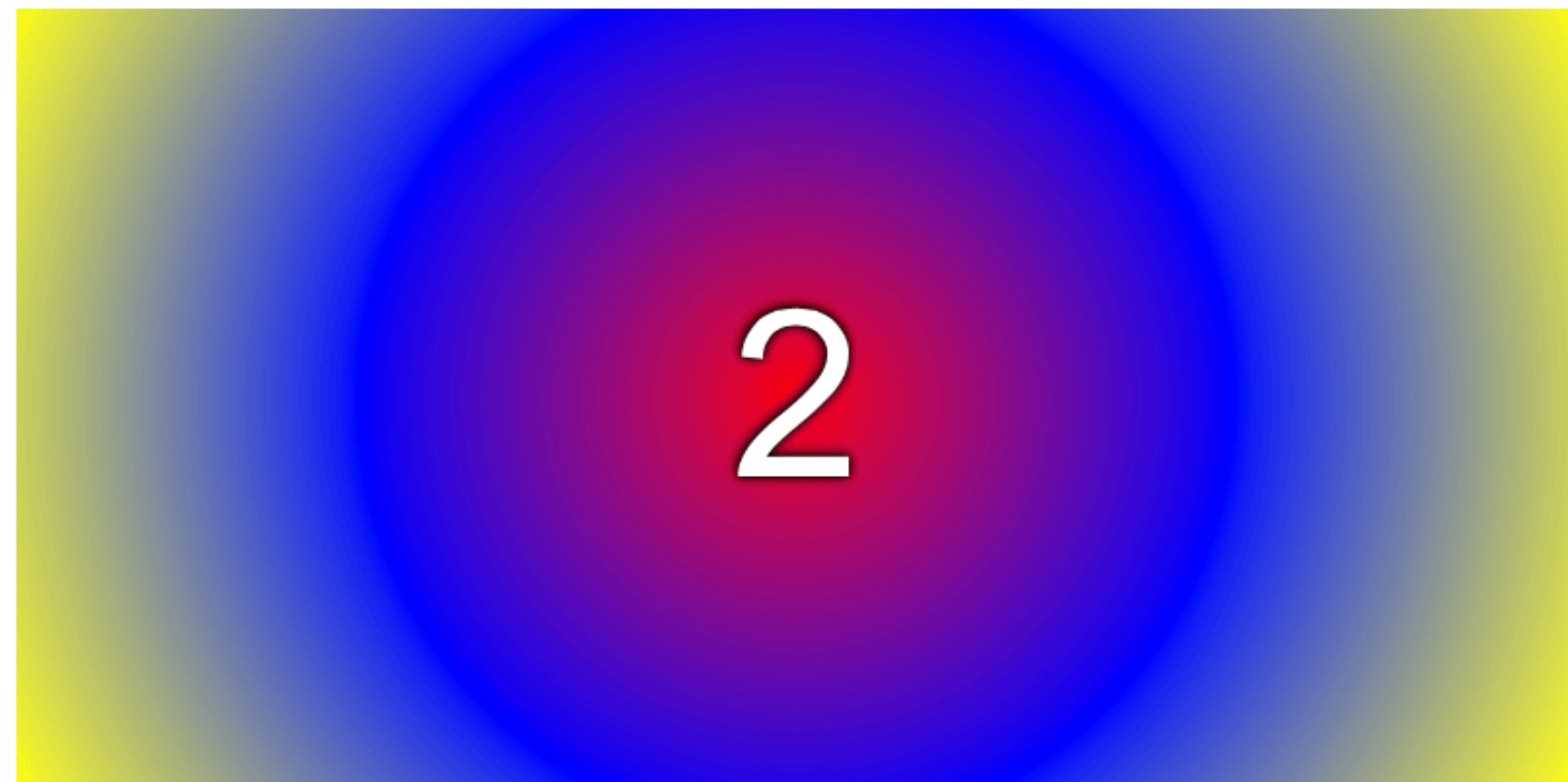
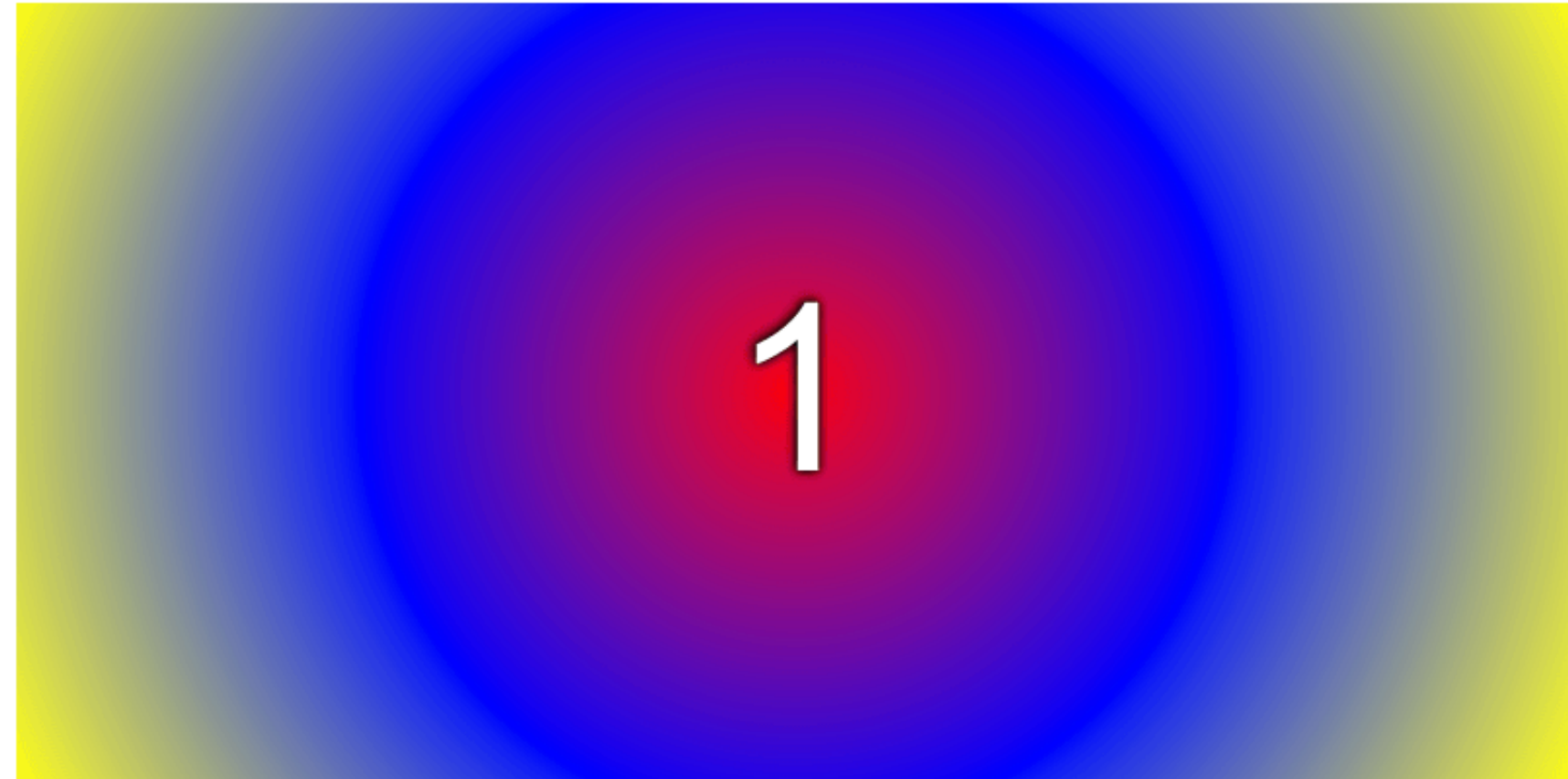
HTML

```
1 <div>1</div>
2 <div>2</div>
3 <div>3</div>
4 <div>4</div>
5 <div>5</div>
```

CSS

```
1 /* The basics, two color stops */
2
3 div:nth-of-type(1) {
4   background-image: radial-
5   gradient(circle, red, blue, yellow);
6 }
7
8 /* Verbose, but same as first */
9
10 div:nth-of-type(2) {
11   background-image: radial-
12   gradient(circle farthest-corner at 50%
```

JS



Cool examples of using layered background gradients to
create patterns



Tweet

2,159



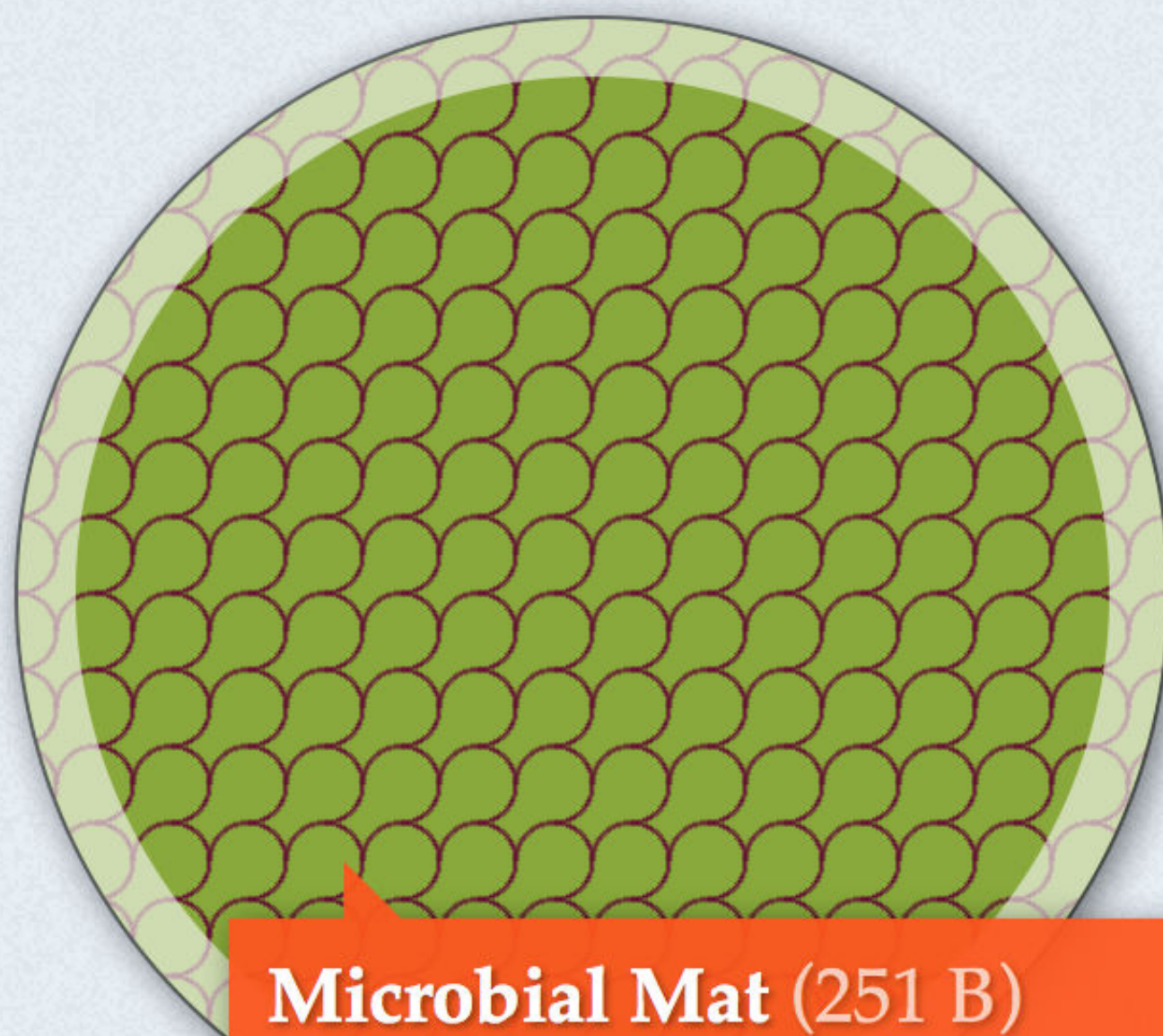
Like

Share

1.2k

CSS3 Patterns Gallery

Click on a pattern to expand • Textareas are editable • [Browser support](#) • [Submit a new one](#) • [Github repo](#) • Enjoy!



Microbial Mat (251 B)

by Logan McBroom



Stairs (239 B)

by Logan McBroom





Tweet

2,159



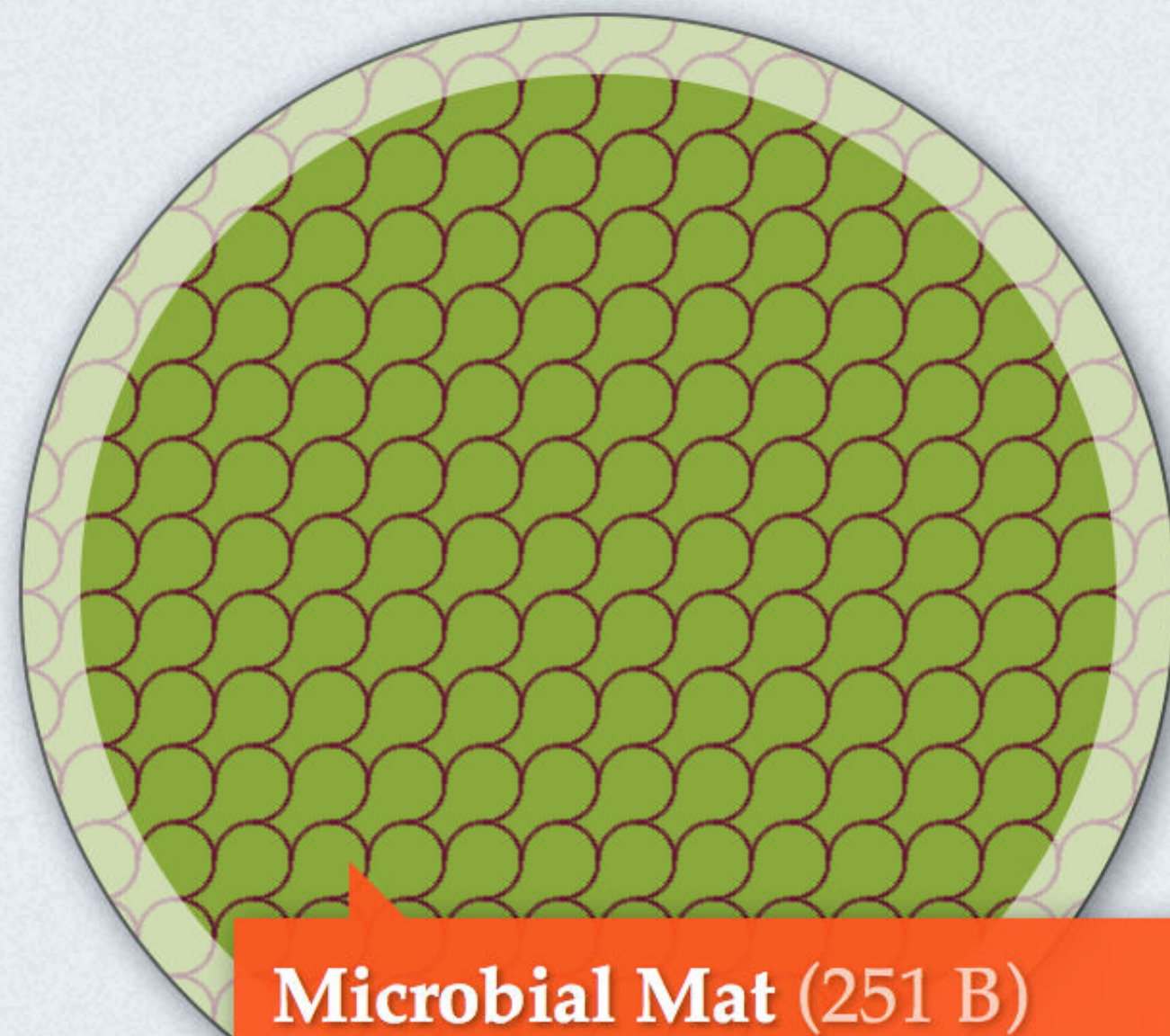
Like

Share

1.2k

CSS3 Patterns Gallery

lea.verou.me/css3patterns/



Microbial Mat (251 B)

by Logan McBroom



Stairs (239 B)

by Logan McBroom





Tweet

2,159



Like

Share

1.2k

CSS3 Patterns Gallery

Arrows (409 B)

by Jeroen Franse

```
background:
linear-gradient(45deg, #92baac 45px, transparent 45px)64px 64px,
linear-gradient(45deg, #92baac 45px, transparent 45px,transparent 91px, #e1ebbd 91px, #e1ebbd
linear-gradient(-45deg, #92baac 23px, transparent 23px, transparent 68px,#92baac 68px,#92baac
background-color:#e1ebbd;
background-size: 128px 128px;
```

lea.verou.me/css3patterns/#arrows

Arrows (409 B)

by Jeroen Franse

```
background:
linear-gradient(45deg, #92baac 45px, transparent 45px)64px 64px,
linear-gradient(45deg, #92baac 45px, transparent 45px,transparent 91px, #e1ebbd 91px, #e1ebbd
linear-gradient(-45deg, #92baac 23px, transparent 23px, transparent 68px,#92baac 68px,#92baac
background-color:#e1ebbd;
background-size: 128px 128px;
```



Tweet

2,159



Like

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CSS3 Patterns Gallery

Blueprint grid (396 B)



```
background-color:#269;  
background-image: linear-gradient(white 2px, transparent 2px),  
linear-gradient(90deg, white 2px, transparent 2px),  
linear-gradient(rgba(255,255,255,.3) 1px, transparent 1px),  
linear-gradient(90deg, rgba(255,255,255,.3) 1px, transparent 1px);  
background-size:100px 100px, 100px 100px, 20px 20px, 20px 20px;  
background-position:-2px -2px, -2px -2px, -1px -1px, -1px -1px
```

lea.verou.me/css3patterns/#blueprint-grid

Blueprint grid (396 B)

```
background-color:#269;  
background-image: linear-gradient(white 2px, transparent 2px),  
linear-gradient(90deg, white 2px, transparent 2px),  
linear-gradient(rgba(255,255,255,.3) 1px, transparent 1px),  
linear-gradient(90deg, rgba(255,255,255,.3) 1px, transparent 1px);  
background-size:100px 100px, 100px 100px, 20px 20px, 20px 20px;  
background-position:-2px -2px, -2px -2px, -1px -1px, -1px -1px
```

CSS3 Patterns Gallery

Hearts (943 B)

```
background:
radial-gradient(circle closest-side at 60% 43%, #b03 26%, rgba(187,0,51,0) 27%),
radial-gradient(circle closest-side at 40% 43%, #b03 26%, rgba(187,0,51,0) 27%),
radial-gradient(circle closest-side at 40% 22%, #d35 45%, rgba(221,51,85,0) 46%),
radial-gradient(circle closest-side at 60% 22%, #d35 45%, rgba(221,51,85,0) 46%),
radial-gradient(circle closest-side at 50% 35%, #d35 30%, rgba(221,51,85,0) 31%),

radial-gradient(circle closest-side at 60% 43%, #b03 26%, rgba(187,0,51,0) 27%) 50px 50px,
radial-gradient(circle closest-side at 40% 43%, #b03 26%, rgba(187,0,51,0) 27%) 50px 50px,
radial-gradient(circle closest-side at 40% 22%, #d35 45%, rgba(221,51,85,0) 46%) 50px 50px,
radial-gradient(circle closest-side at 60% 22%, #d35 45%, rgba(221,51,85,0) 46%) 50px 50px,
radial-gradient(circle closest-side at 50% 35%, #d35 30%, rgba(221,51,85,0) 31%) 50px 50px;
background-color:#b03;
background-size:100px 100px;
```

Hearts (943 B)

background:

```
radial-gradient(circle closest-side at 60% 43%, #b03 26%, rgba(187,0,51,0) 27%),  
radial-gradient(circle closest-side at 40% 43%, #b03 26%, rgba(187,0,51,0) 27%),  
radial-gradient(circle closest-side at 40% 22%, #d35 45%, rgba(221,51,85,0) 46%),  
radial-gradient(circle closest-side at 60% 22%, #d35 45%, rgba(221,51,85,0) 46%),  
radial-gradient(circle closest-side at 50% 35%, #d35 30%, rgba(221,51,85,0) 31%),
```

```
radial-gradient(circle closest-side at 60% 43%, #b03 26%, rgba(187,0,51,0) 27%) 50px 50px,  
radial-gradient(circle closest-side at 40% 43%, #b03 26%, rgba(187,0,51,0) 27%) 50px 50px,  
radial-gradient(circle closest-side at 40% 22%, #d35 45%, rgba(221,51,85,0) 46%) 50px 50px,  
radial-gradient(circle closest-side at 60% 22%, #d35 45%, rgba(221,51,85,0) 46%) 50px 50px,  
radial-gradient(circle closest-side at 50% 35%, #d35 30%, rgba(221,51,85,0) 31%) 50px 50px;  
background-color:#b03;  
background-size:100px 100px;
```

Border Effects

`border-image`

Draws an *image on the borders* of elements

Don't use it



						
<code>border-image</code>	11	6	16	15	2.1*	3.2*

* Requires vendor prefix

border-top-left-radius
border-top-right-radius
border-bottom-right-radius
border-bottom-left-radius

border-radius

Rounds corners or turns boxes into circles

⚙ HTML

⚙ CSS

```
1  div {
2    border-radius: 2%;
3  }
4
5  div {
6    margin: 30px;
7    border: 30px solid hsla(0, 100%, 50%,
8      .5);
9    padding: 30px;
10   width: 300px;
11   height: 300px;
12   background-color: lightskyblue;
13   text-align: justify;
14 }
```

⚙ JS

It is said that in Ulthar, which lies beyond the river Skai, no man may kill a cat; and this I can verily believe as I gaze upon him who sitteth purring before the fire. For the cat is cryptic, and close to strange things which men cannot see. He is the soul of antique Aegyptus, and bearer of tales from forgotten cities in Meroe and Ophir. He is the kin of the jungle's lords, and heir to the secrets of hoary and sinister Africa. The Sphinx is his cousin, and he speaks her language; but he is more ancient than the Sphinx, and remembers that which she hath forgotten.

⚙ HTML

⌵ ⌵

1 <div class="circle"></div>
2
3 <div class="oval"></div>

⚙ CSS

👁 ⌵ ⌵

⌵

1 .circle {
2 width: 100px;
3 height: 100px;
4 border-radius: 50%; /* or 50px */
5 }
6
7 .oval {
8 width: 200px;
9 height: 100px;
10 border-radius: 100px / 50%;
11 }
12
13 /* Uninteresting stuff below here */
14
15 div {

A visual representation of the CSS styles defined above. It shows a solid orange circle and a solid orange oval. The circle is positioned above and to the left of the oval, demonstrating the effect of the .circle and .oval CSS classes.

May 1981: Steve Jobs & crew are developing the Macintosh

“Steve suddenly got more intense. ‘Rectangles with rounded corners are everywhere! Just look around this room!’. And sure enough, there were lots of them, like the whiteboard and some of the desks and tables. Then he pointed out the window. ‘And look outside, there's even more, practically everywhere you look!’. He even persuaded Bill to take a quick walk around the block with him, pointing out every rectangle with rounded corners that he could find. ... Over the next few months, roundrects worked their way into various parts of the user interface, and soon became indispensable.”



`border-radius`

9

5

5

4

2.1*

3.2*

Elliptical borders

Y

Y

Y

3.5

?

?

4 values for 4 corners

Y

5

4

Y

?

?

Percentages

9

5.1

5

4

3

4.1

* Requires vendor prefix

box-shadow

Creates attractive *shadow effects* on elements

Values

- » **inset**: if specified (default is not specified), shadows are drawn inside box
- » **<offset-x>**: **<length>** that sets horizontal distance
- » **<offset-y>**: **<length>** that sets vertical distance
- » **<blur-radius>**: **<length>** that sets blur size (default is 0)
- » **<spread-radius>**: Positive **<length>** causes shadow to expand; negative causes it to shrink (default is 0)
- » **<color>**: Color of shadow using **<color>**

⚙ HTML



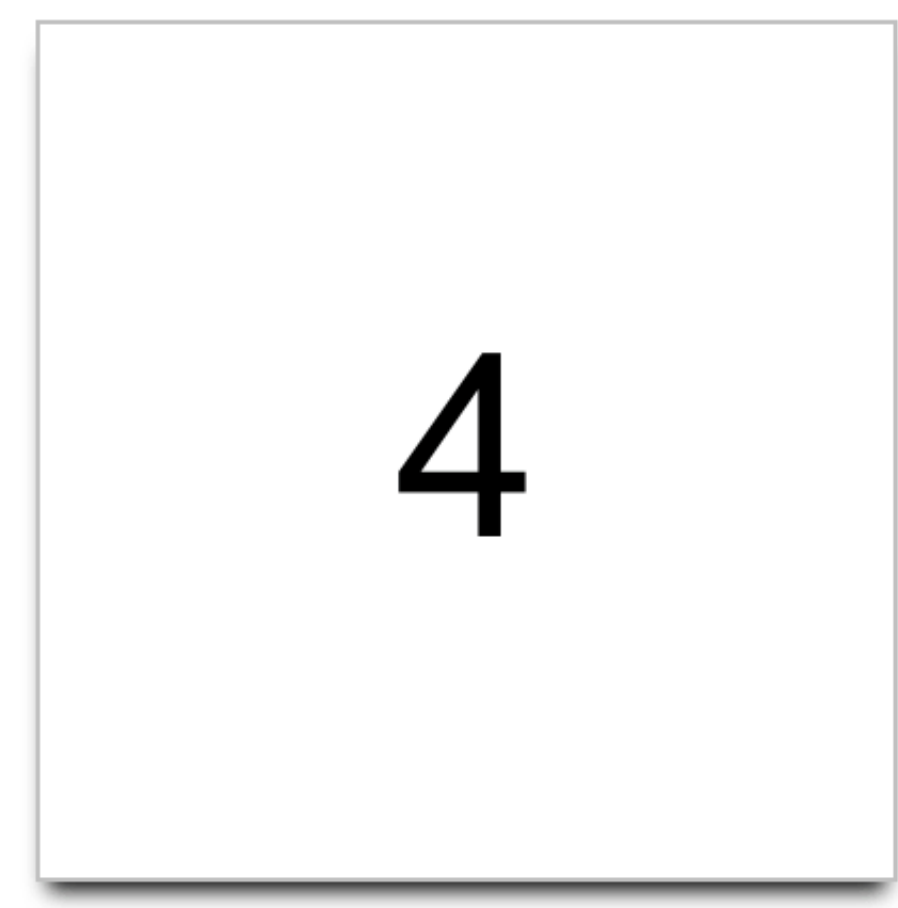
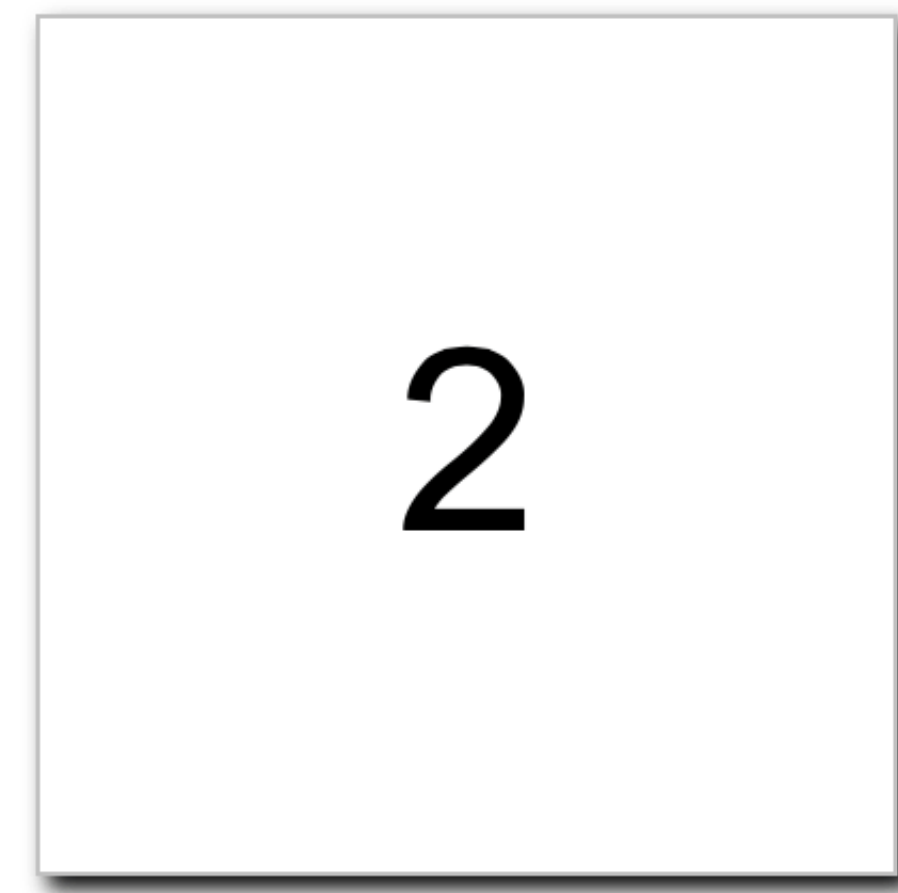
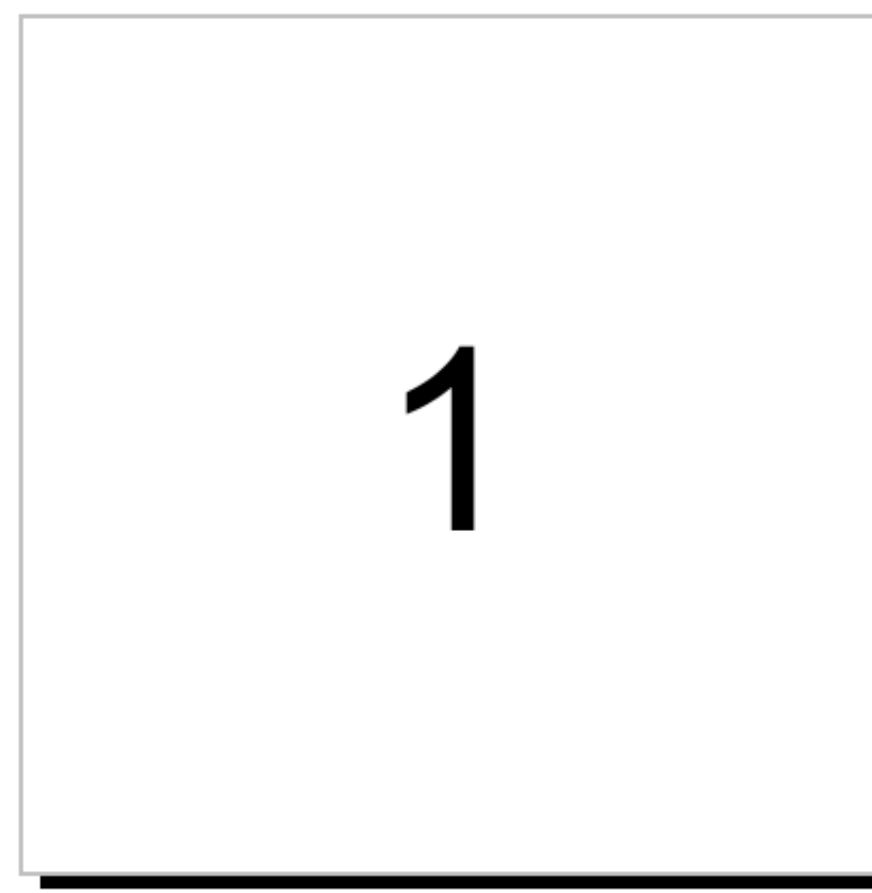
```
1 <div>1</div>
2 <div>2</div>
3 <div>3</div>
4 <div>4</div>
5 <div>5</div>
6 <div>6</div>
7 <div>7</div>
```

⚙ CSS



```
1 /* <offset-x> <offset-y> <color> */
2
3 div:nth-of-type(1) {
4   box-shadow: 5px 3px black;
5 }
6
7 /* <offset-x> <offset-y> <blur-radius>
   <color> */
8
9 div:nth-of-type(2) {
10  box-shadow: 3px 3px 5px black;
11 }
```

⚙ JS





box-shadow

9

5.1

10

4

2.2*

5

Multiple shadows

9

5.1

10

4

?

5

inset

9

5.1

10

4

?

5

Spread radius

9

5.1

10

4

?

5

* Requires vendor prefix

transform

transform allows you to modify the coordinates & appearance of an element by rotating, scaling, & more

2D

transform
transform-origin

3D

transform-style
perspective
perspective-origin
backface-visibility

⚙ HTML

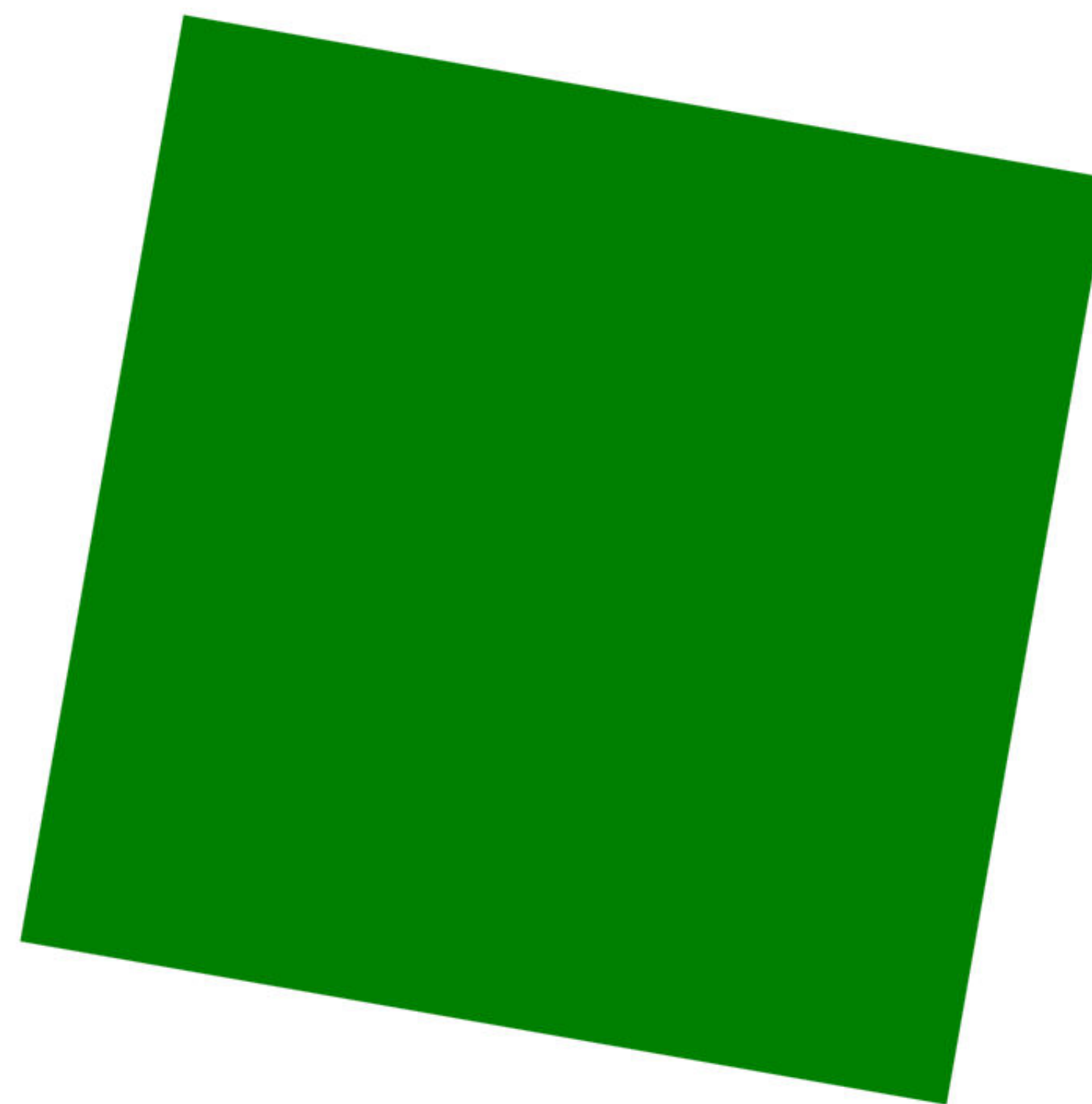
⚙ CSS

```
1  /* Move the CSS declaration you want to
   test to the end of its declaration
   block */
```

```
2
3  div {
4      transform: scale(2,1.25);
5      transform: matrix(1, -0.1, 0.2, 1, 0,
6      0);
7      transform: scaleX(2);
8      transform: scaleY(0.3);
9      transform: scale(2,1.25); /* scaleX
   and scaleY */
10     transform: skewX(-30deg);
11     transform: skewY(4deg);
12     transform: translateX(50px);
13     transform: translateY(20px);
14     transform: translate(50px, 20px); /*
   translateX and translateY */
15     transform: rotate(10deg);
16 }
```

```
17 div {
18     transform-origin: 50% 50%; /* default
   is 50% 50%*/
19     transform-style: flat; /* default is
   flat*/
20 }
```

⚙ JS



⚙ HTML



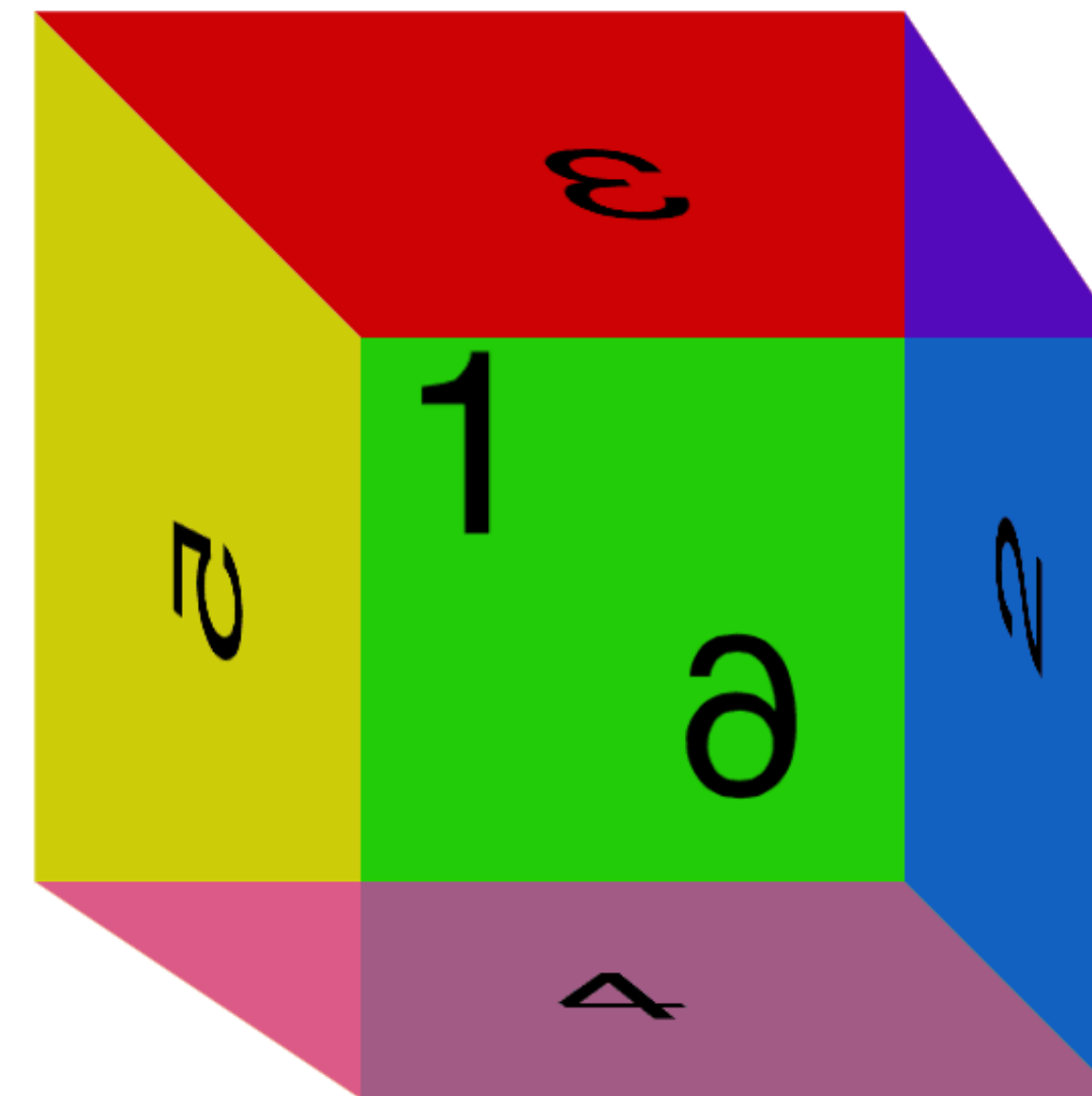
```
1 <div class="cube">
2   <div class="front">1</div>
3   <div class="back">6</div>
4   <div class="right">2</div>
5   <div class="left">5</div>
6   <div class="top">3</div>
7   <div class="bottom">4</div>
8 </div>
```

⚙ CSS



```
1 .cube {
2   width: 200px;
3   height: 200px;
4   transform-style: preserve-3d;
5   perspective: 1500px;
6   perspective-origin: 300% 300%;
7 }
8
9 /* Draw each cube face */
10
11 div > div {
12   position: absolute;
```

⚙ JS





2D

9 -ms
10

3.1
-webkit

4 -webkit
36

3.5 -moz
16

2.1
-webkit

3.2
-webkit

3D

10

4
-webkit

12 -webkit
36

10 -moz
16

3
-webkit

3.2
-webkit

Creating Shapes

You can create a huge variety of shapes using CSS

⚙ HTML



```
1 <h2>Square</h2>
2 <div id="square"></div>
3
4 <h2>Rectangle</h2>
5 <div id="rectangle"></div>
6
7 <h2>Circle</h2>
8 <div id="circle"></div>
9
10 <h2>Oval</h2>
11 <div id="oval"></div>
12
13 <h2>Egg</h2>
14 <div id="egg"></div>
15
16 <h2>Squircle</h2>
17 <div id="squircle"></div>
18
19 <h2>Rectoval</h2>
20 <div id="rectoval"></div>
21
22 <h2>Triangle Up</h2>
23 <div id="triangle-up"></div>
24
25 <h2>Triangle Down</h2>
26 <div id="triangle-down"></div>
27
```

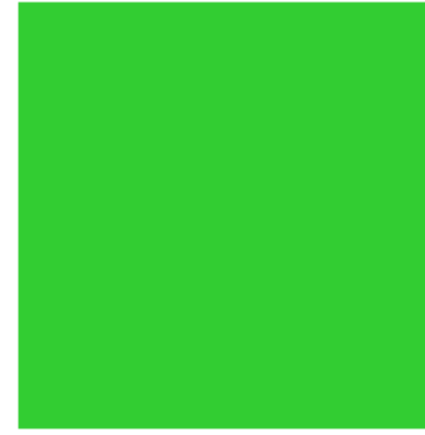
⚙ CSS



⚙ JS



Square



Rectangle



Circle



Oval



⚙ HTML

⚙ CSS



```
1 #square {
2   width: 100px;
3   height: 100px;
4   background: limegreen;
5 }
6
7 #rectangle {
8   width: 200px;
9   height: 100px;
10  background: darkorange;
11 }
12
13 #circle {
14   width: 100px;
15   height: 100px;
16   background: darkcyan;
17   border-radius: 50%;
18 }
19
20 #oval {
21   width: 200px;
22   height: 100px;
23   background: darkorchid;
24   border-radius: 50%;
25 }
26
27 #egg {
```

⚙ JS



Square



Rectangle



Circle



Oval



Thank you!

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Decorating with CSS

Cool Ways to Make Things Pretty

R. Scott Granneman

Jans Carton

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Last updated 2015-01-14

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Changelog

2015-01-14 1.4: Updated compatibility chart for **radial-gradient**; added term *resource inlining* for Data URL

2014-08-06 1.3: Added Creating Shapes section; changed subtitle

Changelog

2014-08-04 1.2: Renamed presentation to “Decorating with CSS”; moved **transform** from “Animation” slides to here

2014-08-04 1.1.3: Moved Opacity section to Layout slideshow

2014-08-03 1.1.2: More screenshots & details for **border-radius**; fixed compatibility tables; defined *color stop*; added **background** screenshot

2014-05-15 1.1.1: Many corrections & additions

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