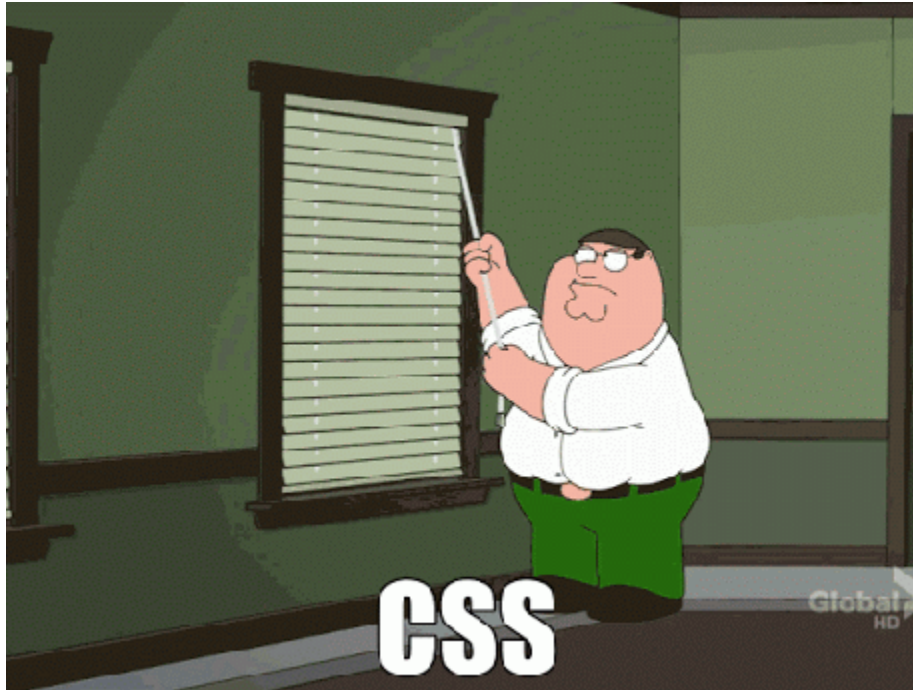


General advice

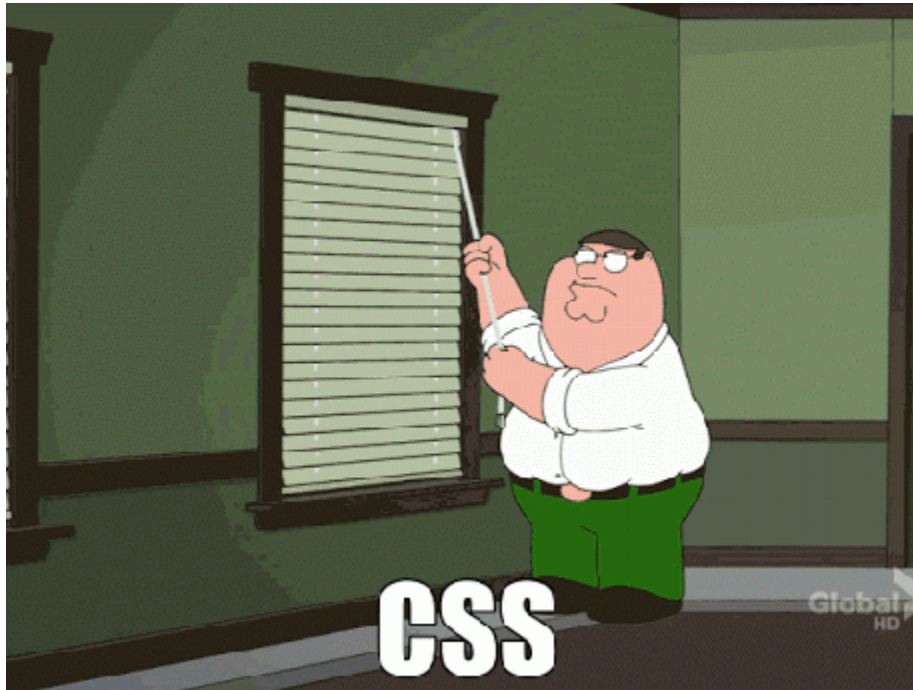
#1: Celebrate!

If this is you...



<https://gif-central.blogspot.com/2013/07/family-guy-css.html?m=1#.WcF8rsiGPiV>

If this is you...



#2:



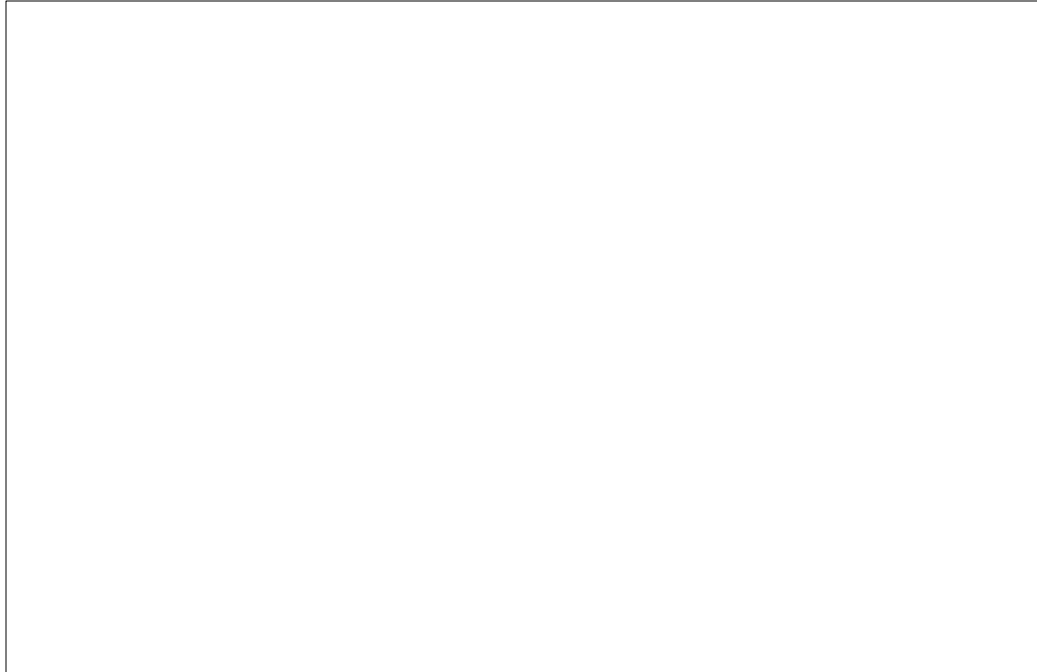
<https://gif-central.blogspot.com/2013/07/family-guy-css.html?m=1#.WcF8rsiGPIV>

- #1:** Celebrate!
- #2:** Don't panic
- #3:** Start early
- #4:** Commit often
- #5:** Practice your Google-fu



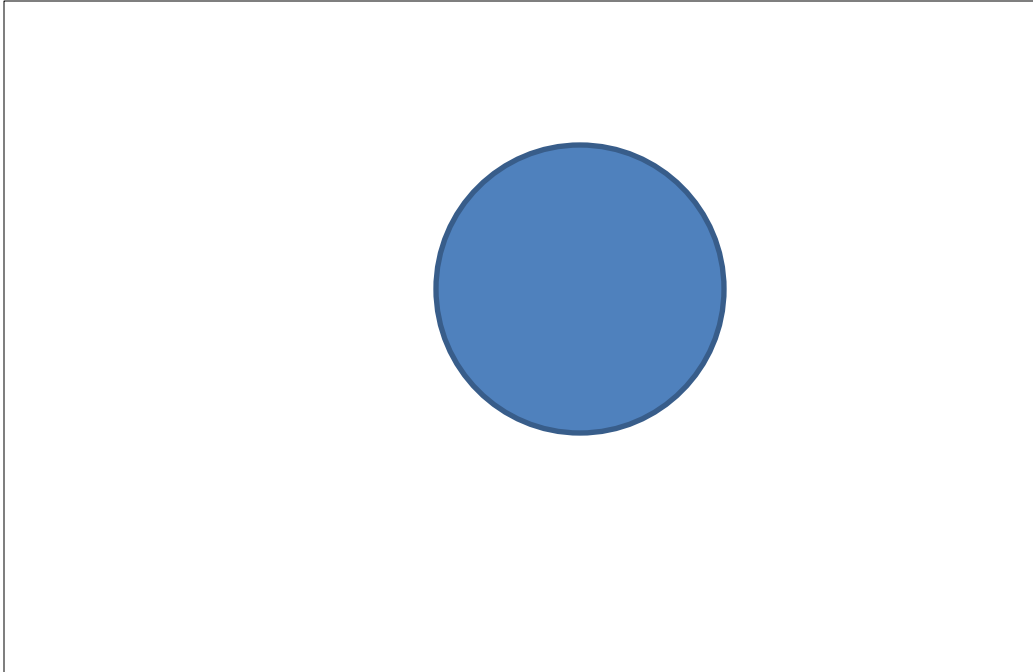
- #6:** Keep your sense of humor
- #7:** Ask other people for help

Make an SVG element



```
<body>  
  <svg width="700" height="500" >  
    </svg>  
  
</body>
```

Think back to your index cards:



Where **is** the circle?

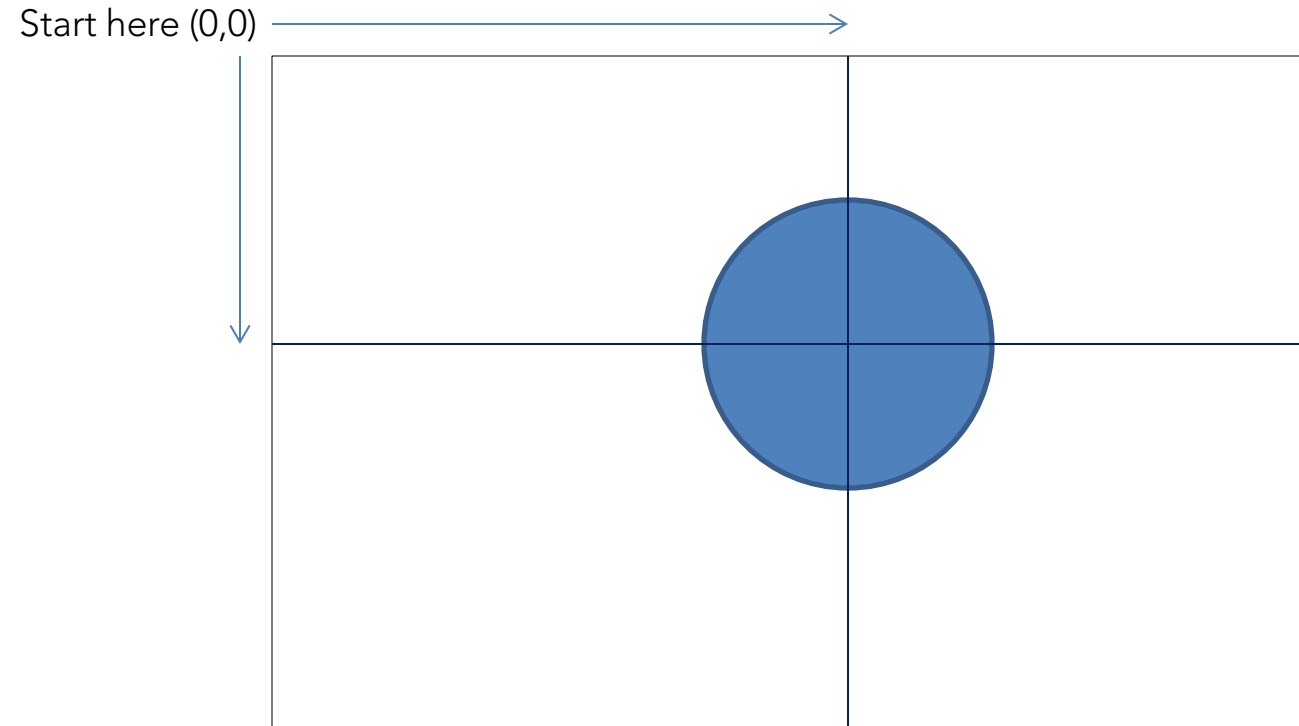
How big is it?

What color should I
use to draw it?

Is it filled in?

How thick is the line
around the edge?

Where is the circle?



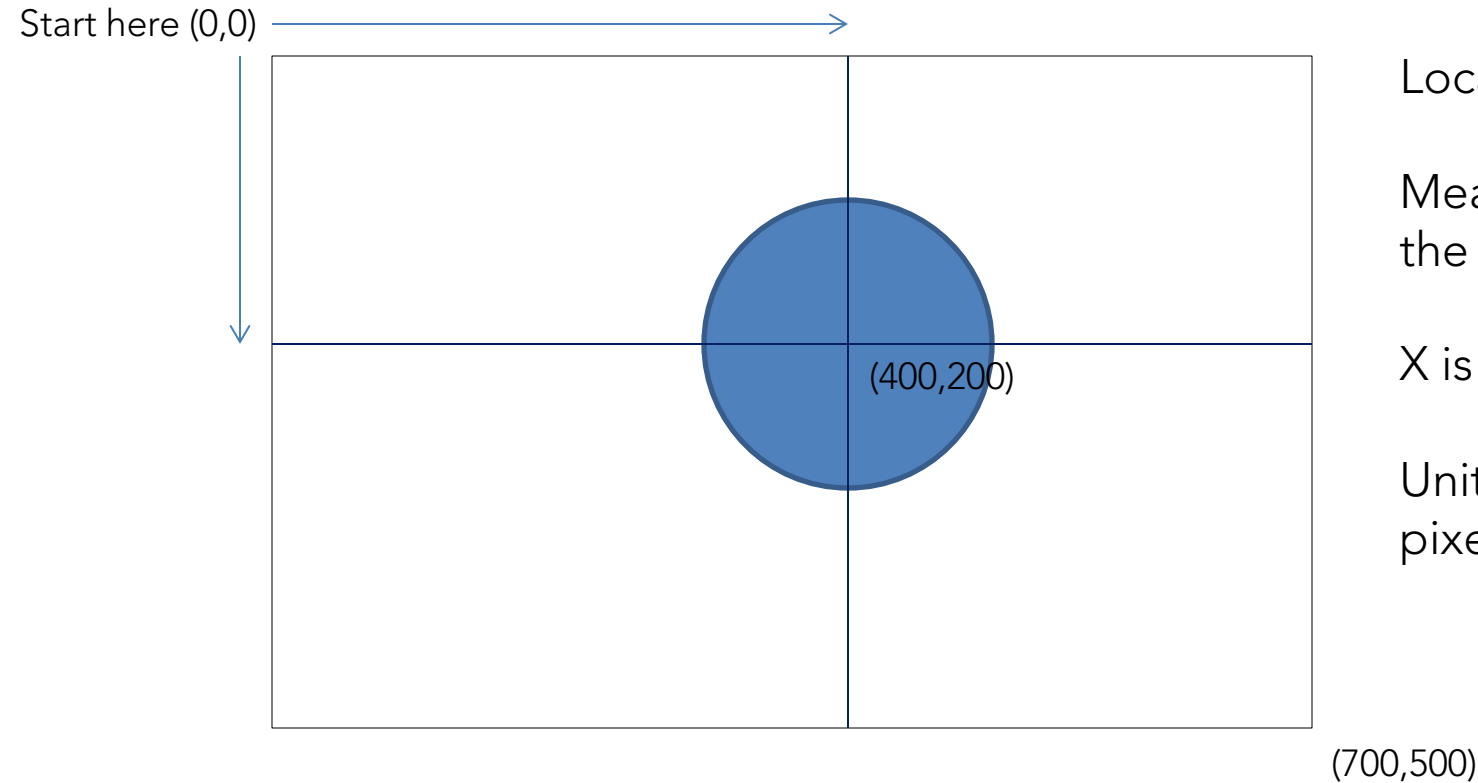
Locate its center

Measure relative to
the SVG canvas

X is over, y is *down*

Units are usually in
pixels or percent

Where is the circle?



Locate its center

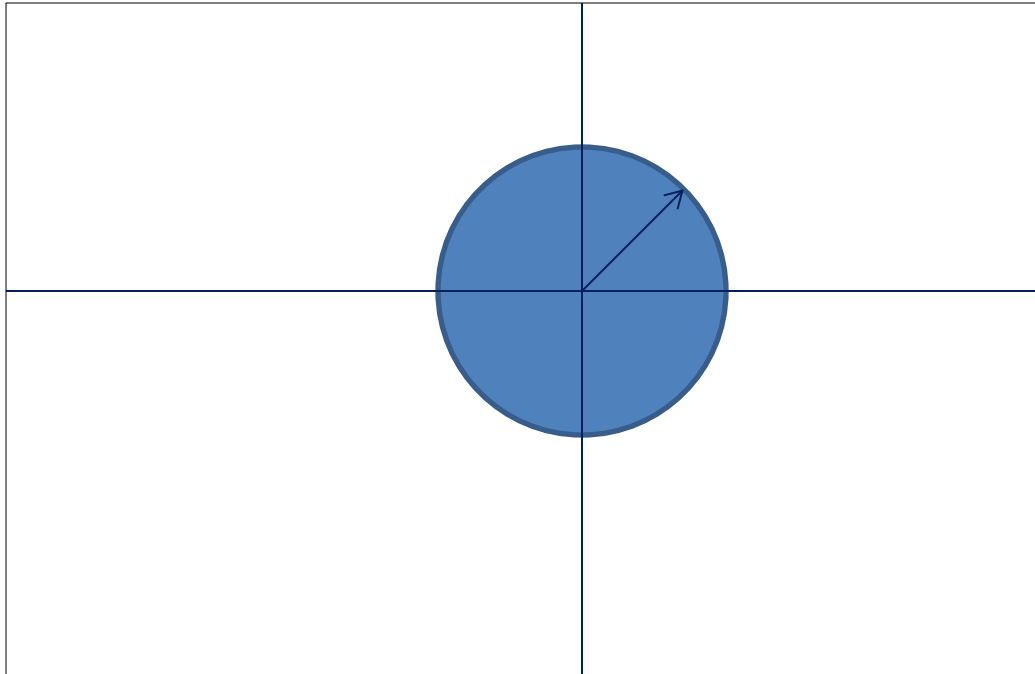
Measure relative to
the SVG element

X is over, y is *down*

Units are usually in
pixels or percent

```
<circle cx="400" cy="200"> </circle>
```

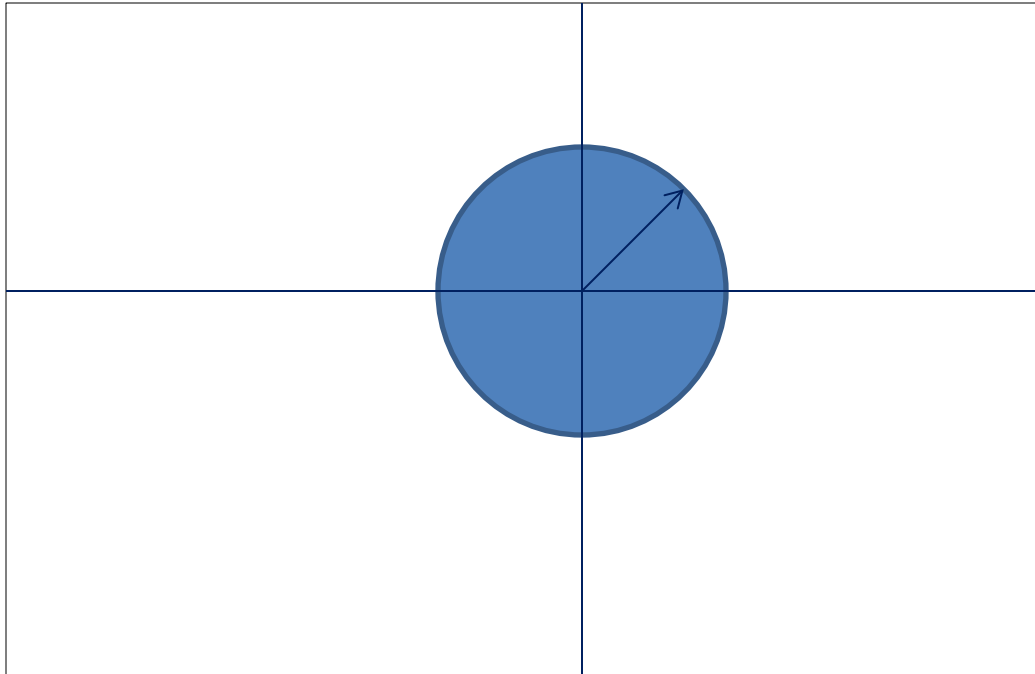

How big is it?



Size defined by radius

```
<circle cx="400" cy="200" r="100"> </circle>
```

What should it look like?



Color uses standard
HTML color names,
hexadecimal, or RGB

```
<circle cx="400" cy="200" r="100" stroke="lightsteelblue"  
stroke-width="2" fill="steelblue"> </circle>
```

Move styling into CSS

HTML:

```
<circle cx="400" cy="200" r="100" class="circle" id="circle1">  
</circle>
```

CSS:

```
#circle{  
  stroke: steelblue;  
}
```

```
.circle1{  
  fill: lightsteelblue;  
}
```

Move drawing into Javascript/d3

HTML: empty svg element

```
<svg></svg>
```

Check that d3 library and js file are linked to HTML page:

```
<script src="./d3.v4.2.6.min.js"></script>
```

```
<script src="./index.js"></script>
```

D3 selection

Grab the svg element from the HTML page and save it as a variable

```
var svg = d3.select('svg')
```

(...or give the svg a class and select it that way)

(...or select the body tag and append an svg instead)

Once we have the svg stored in d3, we can draw on it.

```
svg.append('circle')  
  .attr('cx', 400)  
  .attr('cy', 200)  
  .attr('r', 100)  
  .attr('class', 'circle')  
  .style('fill', 'lightsteelblue')  
  .style('stroke', 'steelblue')  
  .style('stroke-width', '3');
```

If there's time...

```
.on('click', function(){  
    d3.select(this).attr('fill','green');  
})
```

If statements

Length scales

```
var myScale = d3.scaleLinear()  
    .domain([0, 10])  
    .range([0, 600]);
```