

## STEAMCODED.ORG

## Coding Rotating Ellipses in SVG on a 600 by 600 grid

To get started copy the code of this image into your editor: http://steamcoded.org/lessons/grid600x600.svg.txt and save the file as ellipses.svg and open the file in a browser.

1: Append the following attributes to the <g> element with style="opacity:0.5;" Add styles: "fill:none;stroke:darkred;"

2: Create a <ellipse> element with id="e1" centered at $(300,300)$ with x-radius: 50 and y-radius: 295

3: Reuse the ellipse with id="e1" by adding a <use> element with attributes: xlink:href="\#e1"
transform="rotate $(5,300,300)$ "
4: Repeat step 3 rotating every 5 degrees until reaching 175 because rotating 180 degrees will be a duplicate of the original ellipse.

5: Add a <circle> element centered at $(300,300)$ with a radius of 295
6: Add a <circle> element centered at $(300,300)$ with a radius of 50
When complete, change the style attribute of the first element from "display:initial" to "display:none" which hides the grid. Then change the style attribute of the second element from "opacity:0.5" to "opacity:1"

