

## Report / Homework (100 pts)

- 1) Copy and paste the code changes you made to change the color of the first triangle. What values have you changed?

```
gl_PointSize = 5.0;  
gl_FragColor = vec4( 0.0, 1.0, 0.1, 1.0);
```

- 2) Triangle rotation a) Copy/paste the code you made to rotate the triangle. b) Can you think of any other way to rotate the triangle? Describe one possibility.

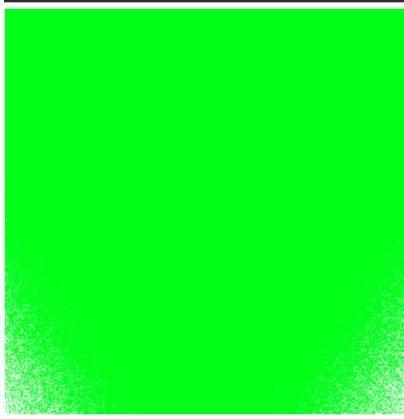
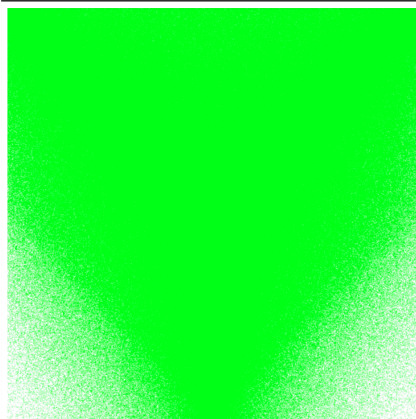
```
var vertices = [  
  vec2( 1, 1 ),  
  vec2( 0, -1 ),  
  vec2(-1, 1 )];
```

We could potentially call the rotateX() function with a set degree.

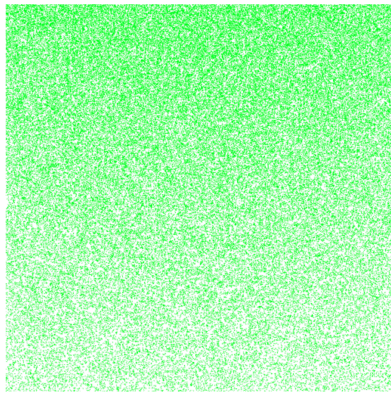
- 3) What does it mean to perturb the bisector, as performed in Section 3?

To influence tending to alter its normal or regular state or path. Perturbing the points from the shape.

- 4) Paste your screenshots here on perturbing things.



1.Math.Random()  
2.Arbitrary(.1,1.0)  
3.Arbitrary(.1,1.0)



Arbitrary(.9,1.0)  
Arbitrary(.1,.2)

- 5) In the JavaScript file, there are two uses of the scale function. For the second (scale(0.5, p);) modify the value sent in. What do you think is happening here (i.e., what is the purpose of scaling)?

I think that the file is being scaled closer on a range from [0.0,1.0]. It is the amount of zoom that the points have, or depth. When a value of .1 was put in the shape appeared to be far away, but with <.7 the shape was close and in the user's face.

- 6) We have the following three lines of code in all our gasket files, and they will show up in one form or another in pretty much everything we do. What is the purpose of each line of this code block specifically?

```
var vPosition = gl.getAttribLocation( program, "vPosition" );
```

—> Saves the location of an attribute variable in the given program

```
gl.vertexAttribPointer( vPosition, 2, gl.FLOAT, false, 0, 0 );
```

—> Binds the buffer to a generic vertex attribute of the current vertex buffer object and specifies its layout.

```
gl.enableVertexAttribArray( vPosition );
```

—> Turns the generic vertex attribute array at the specific index into the list of attribute arrays

- 7) Create your portfolio website.

<https://agoodling.github.io/CIS367/>