

## **Circle Graphing Process Explanation**

### **Circle 1:**

Beginning the circle drawing process, I got the code to run that could divide the image into multiple different circles. For this first example I rendered the circles without a fill colour (white colour) and with a thin black border to make sure the function that graphed the circles was working in the first place.

### **Circle 2:**

Circles subdivided numerous times with 100% opacity and white background. Addition of colours is based off a selection of colours with random hue, saturation, and brightness values with limitations on the hue. In essence, a predetermined colour scheme was selected by choosing a number of colours and assigning them each a random hue. Every circle graphed thereon has a random hue value from these predetermined hues limited by the number of colours. Saturation and brightness is randomly selected for each circle independently.

### **Circles 3-4:**

Random independent opacity is introduced. Background remains white.

### **Circles 5-10, 22, 23, 24:**

Random independent continues. Background colour chosen randomly based on predetermined random hues.

### **Circle 11:**

All circles after the starting circle are now converted to squares. Where every circle's diameter becomes the corresponding square's side length. Opacity continues as does random colour selection based on colour scheme. Due to opacity significant overlap occurs.

### **Circle 12-13:**

A square or a circle, decided randomly, is drawn at a given point. Opacity and colour settings remain the same (random).

### **Circle 14:**

An extra layer of circles is introduced adding a lot more overlap due to opacity.

### **Circle 15:**

Opacity is set to 100% for all circles and squares. Circles and squares are drawn selected randomly. Colour selection settings remain the same.

### **Circle 16:**

Opacity is re-introduced.

### **Circle 17:**

Only circles are drawn. Random slight variation in radii of ellipses, creating more oval-like shapes rather than regular circles entirely. Colour settings are the same.

### **Circle 18-20:**

Increased random variation in radii of ellipses.

### **Circle 21:**

The starting circle (previously the largest circle) is replaced with a square where the circle's diameter is the square's side length.