Overload the `polygon()` method that we coded in class so that the method can be used in a variety of ways. Here are the method headings for the 7 versions of `polygon()` with a description of their parameters:

`polygon()` – draws a pentagon in the middle of the screen that has a radius of 100 pixels

`polygon(float x, float y)` – draws a pentagon at the (x,y) coordinate given with a radius of 100 pixels

`polygon(float x, float y, int numSides)` – a numSides-sided polygon at the (x,y) coordinate given with a radius of 100 pixels

`polygon(float x, float y, int numSides, float sz)` – a ?-sided polygon at the (x,y) coordinate given with a radius of sz pixels

`polygon(float x, float y, int numSides, float sz, float rotation)` – a ?-sided polygon at the (x,y) coordinate given with a radius of sz pixels that is rotated by a given amount

`polygon(float x, float y, int numSides ,float sz, float rotation, float sWeight)` – a ?-sided polygon at the (x,y) coordinate given with a radius of sz pixels that is rotated by a given amount with a certain thickness on the borders

`polygon(float x, float y, int numSides, float sz, float rotation, float sWeight, color strokeColor, color fillColor)` – a ?-sided polygon at the (x,y) coordinate given with a radius of sz pixels that is rotated by a given amount with a certain thickness on the borders and a specific color for the border and the interior

Put the following 7 method calls into the `draw()` method to make sure your methods work.

```
polygon();
polygon(600, 200);
polygon(150, 300, 7);
polygon(700, 500, 6, 40);
polygon(250, 100, 8, 40, PI/8);
polygon(150, 500, 4, 70, PI/4, 10);
polygon(500, 450, 10, 150, 0, 5, color(180), color(0, 0, 100));
```

Your picture should look like this:

****SEE WORD DOCUMENT ON NETWORK DRIVE****

Bonus – Write an 8th `polygon()` method that allows you to change how the lines connect together (you will be using a method that you have never seen before- look in the reference)