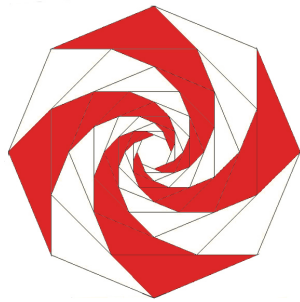
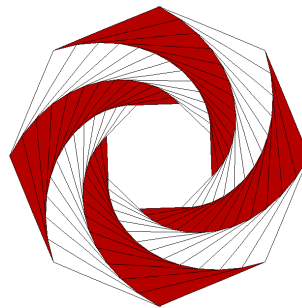


Four Types of Spirals

Point-to-Point Spirals: Point-to-Point spirals are formed by connecting the corners of a polygon. If you have ever drawn a 5-pointed star by crossing from point to point, you have already drawn the beginning of a Point-to-Point spiral. Point-to-Point spirals are best used for polygons of six sides or more, because the triangles quickly become very large. Three- and 4-sided spirals cannot be drawn as Point-to-Point spirals (try it and you'll see why). For 3- and 4-sided spirals, use any of the other types. Point-to-Point spirals offer the fewest opportunities for variation because the size and shape of the triangles are locked by the corners of the polygon.

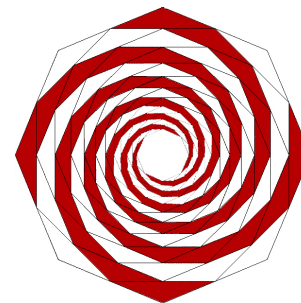
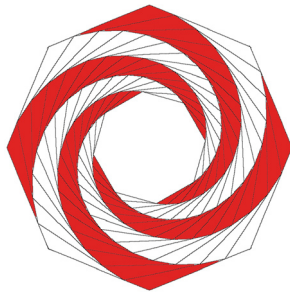


Pinwheel Spirals: Pinwheel spirals are formed by making a mark on each side of the polygon, then connecting the corners of the polygon to the marks. You must choose the distance between the corner and the mark. This distance is what I refer to as an **increment**, so this is an **incremental spiral**. Variations in increment size can make a big difference in the appearance of your spirals. The triangles that create a Pinwheel Spiral are usually much narrower than those in Point-to-Point spirals, so more rings are required to reach the center, but this also makes for a smoother spin.



Triangles and 4-sided polygons can only use Pinwheel and Nesting technique to make spirals.

Nesting Spirals: Nesting spirals are formed by making a mark on each side of a polygon, then connecting the marks to each other. The mark-to-mark lines form a new, smaller polygon of the same shape inside the previous one. As with Pinwheel spirals, you must choose the distance between the corner and the mark, so this is an **incremental spiral**, and you can create a lot of variation in the spiral by changing the size of the increments. Triangles and 4-sided polygons can only use Pinwheel and Nesting technique to make spirals. Nesting spirals look similar to Pinwheel spirals, but differ in some significant ways, one of which is that since the triangles do not fully cover the sides of the polygon, connecting Nesting spirals requires some adjustment.



Baravelle Spirals: Baravelle Spirals are a special type of Nesting spiral. They are formed by marking the **CENTER POINT** of each side of the polygon, then

connecting the marks. This creates triangles that are the same length on two sides (**isosceles triangles**). Like the Point-to-Point spiral, there can be no variation in the way that it is drawn, but it offers many interesting possibilities in the ways it can be colored. For example, the spokes of a Baravelle spiral can be colored in both directions within the same spiral to create interlocking spokes. The traditional Snail's Trail block is a square Baravelle spiral.

