

## How to Build Five Pointed Star by Bill McQuitty

In this tutorial, I will explain how I built five pointed stars for some of my feature rings. The photo below is a picture of a five pointed star I made for the feature ring in one of my vases. Since I don't have pictures showing the process, I'll use drawings instead.



In this article I don't give exact dimensions since stars can be any size. This process can be used for any sized five pointed star.

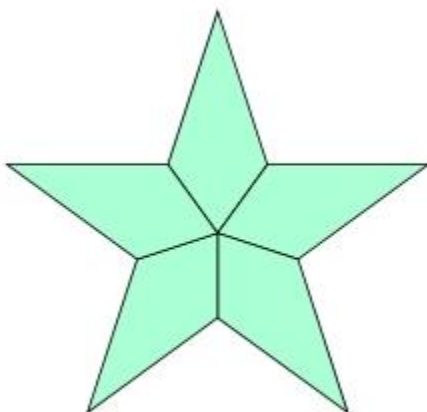


Figure 1

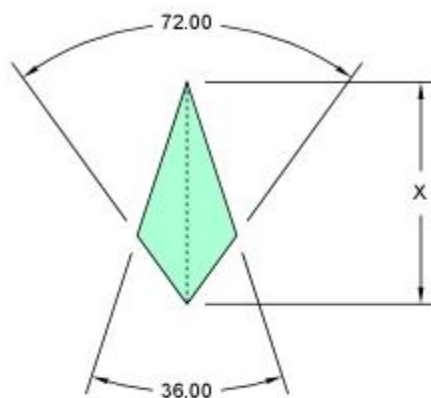


Figure 2

There are any number of sizes and shapes of stars, it all depends on the number of petals/points and the length of each point (i.e. the length from the center point to the end point).

Figure 1 shows the shape I've chosen for my stars. To me it looks well proportioned. Figure 2 shows one petal or point of that star. The angle at the lower part of the point is always 72 degrees for a five pointed star. The angle of the upper part of the point will depend on the length of the point – marked X in the drawing. In my case the angle is 36 degrees.

The drawings below show how I build star segments for my feature rings.

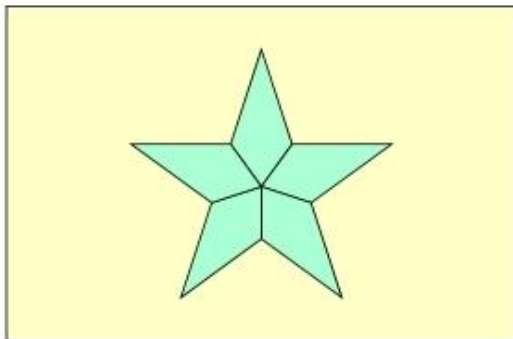


Figure 3

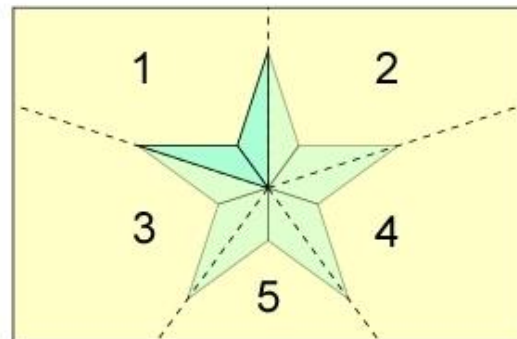


Figure 5

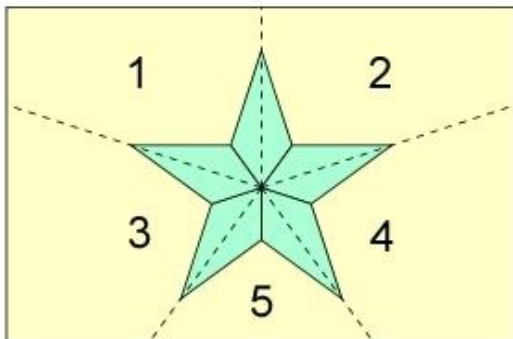


Figure 4

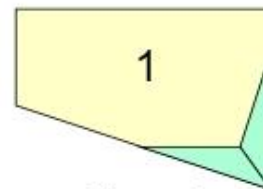


Figure 6

Figure 3 shows a drawing of what the final segment will look like.

Figure 4 shows how we divide the segment into five sections. We do this by drawing a line from the center point through each star point to the edge of the segment.

Figure 5 shows how we build each section of the segment. It will consist of the background (yellow) and halves of two star points (green).

Figure 6 shows what the final section will look like when complete.

Figure 7 shows the process for cutting and sanding the background (yellow) part of one section.

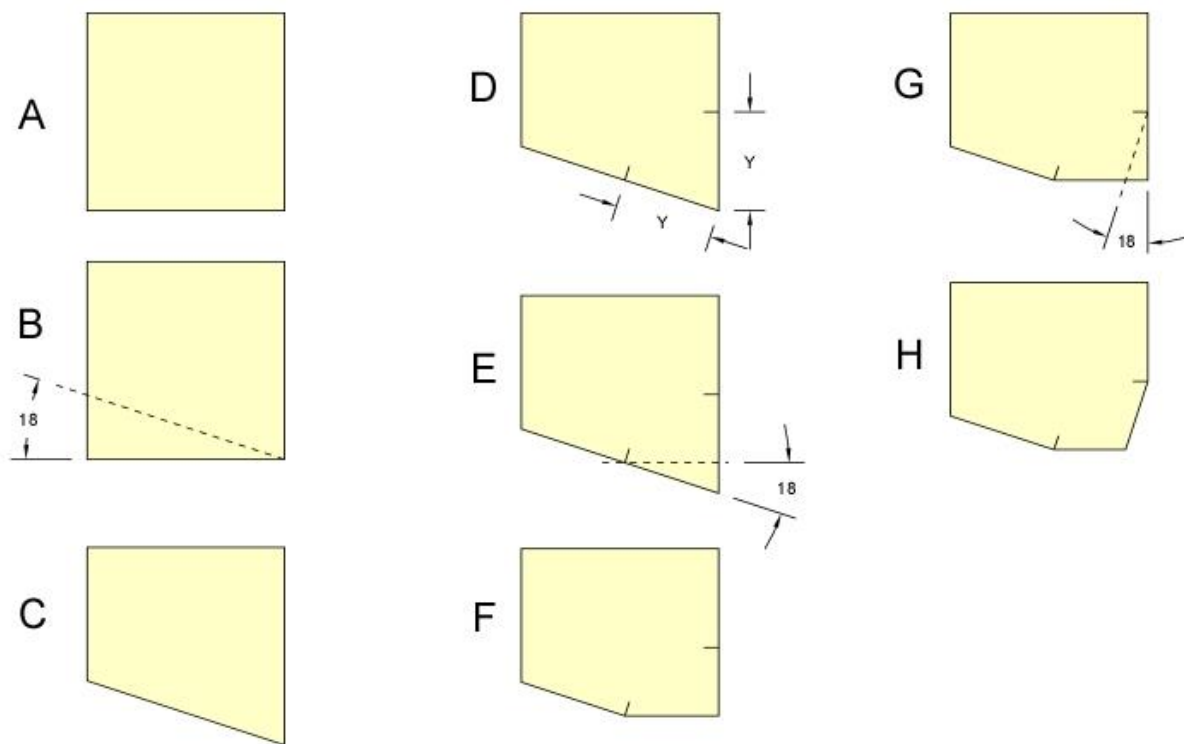


Figure 7

A) Cut a piece of the background material. The dimensions will be determined by the size of the segment you are building. NOTE: make sure all four sides are sanded and 90 degrees to the other sides. B) At the bottom of the piece, cut and sand on a line 18 degrees from the bottom, right corner. C) This will be the result. D) With a pencil, make two marks on the piece from the bottom, right corner as

shown. The distance Y is approximately 25-30% longer than the X dimension from figure 2. E-G) Cut and sand on the two dotted lines shown in the drawings. These cuts will be from the marks made in step D at 18 degrees. H) This shows what the background piece will look like when complete.

Figure 8 shows the step for creating the two halves of two different star points.

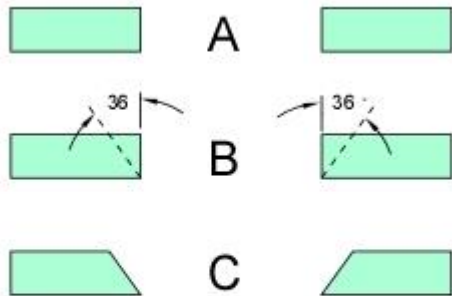


Figure 8

A) Cut two pieces – again, the dimensions are determined by the size of the star you are building. B) Cut and sand the ends of both pieces at 36 degrees as shown. C) This shows the result.

Figure 9: Now glue the three pieces together and sand to final dimension for one section of the star.

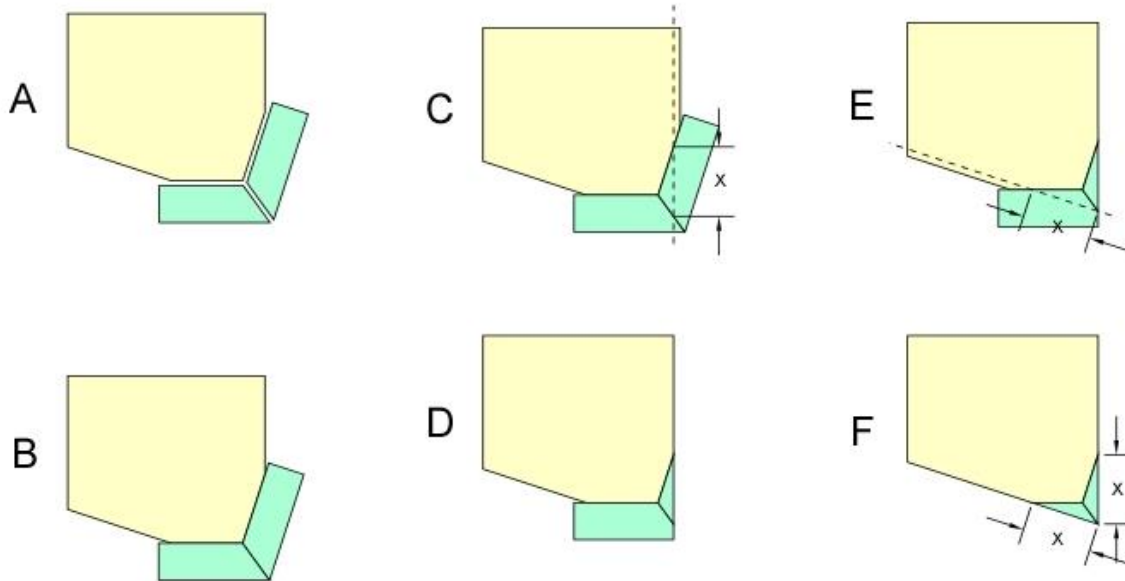


Figure 9

A&B) Glue the three pieces together as shown. C&D) Sand the right edge of the combined section until the left half of the star point measures EXACTLY X (X is the length of the final star point – refer to Figure 2). It is critical that this measurement be exactly X (or as close as possible.) Refer to Figure 10 for a closer view of this measurement. E) Now do the same for the right half of the other star point. Again make sure the measurement is exactly X. F) This shows what the section will look like when finished.

This completes the build for one section of the segment.

Build four more just like this one.

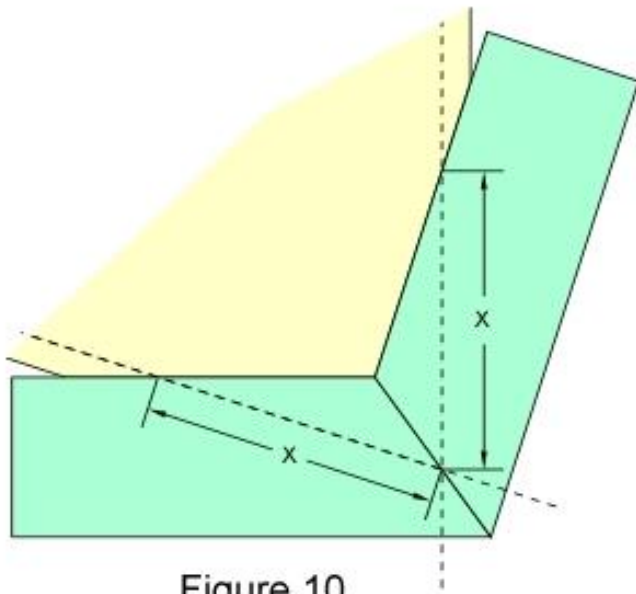


Figure 10

After building five sections using the instructions above, we can now glue them together to form one entire segment for our feature ring.

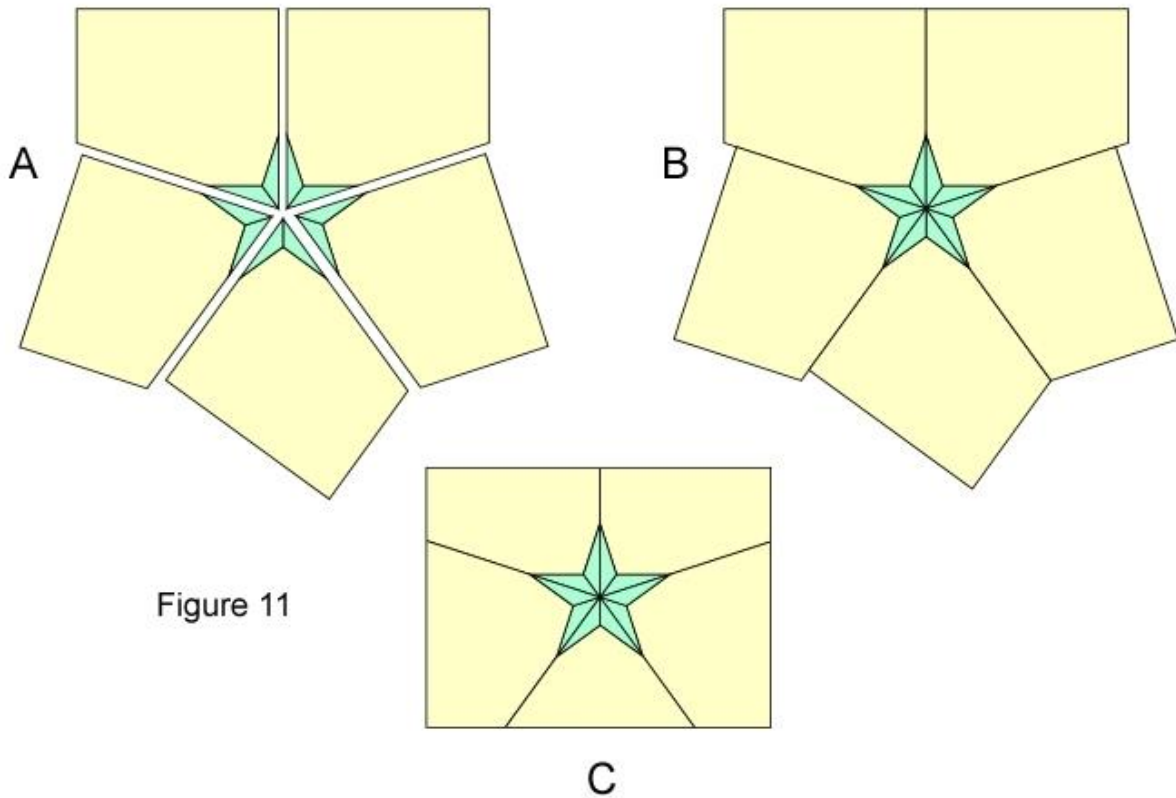


Figure 11

Figure 11 A) Glue the five sections together making sure the interior points of all sections come together at the center. B) Shows the result. If you sanded the pieces to the exact dimensions as shown in Figure 10, then all of the star points should match up perfectly. C) From the glue up of the five sections, cut and sand to the dimension of the desired segment.

Some notes:

If you are using background material which has a lot of grain, you'll probably want to make sure to cut the background material (the yellow part in the drawings above) so the grain of the final segment is running horizontal to the bowl or vase. I don't worry about the grain of the star segments since they are pretty small.

If you use two different colored woods for the two halves of each star point you get something like this:



Using the same method, you can make stars with different numbers of points, like this (of course the angles of the points will be different):



And you can use two different colors for each half of a star point and get something like this:



I hope this helps.

If you have questions or comments, please contact me.