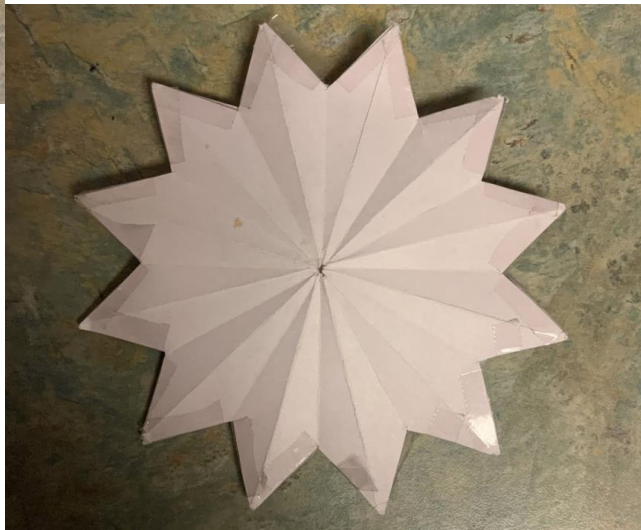




Puffy Stars



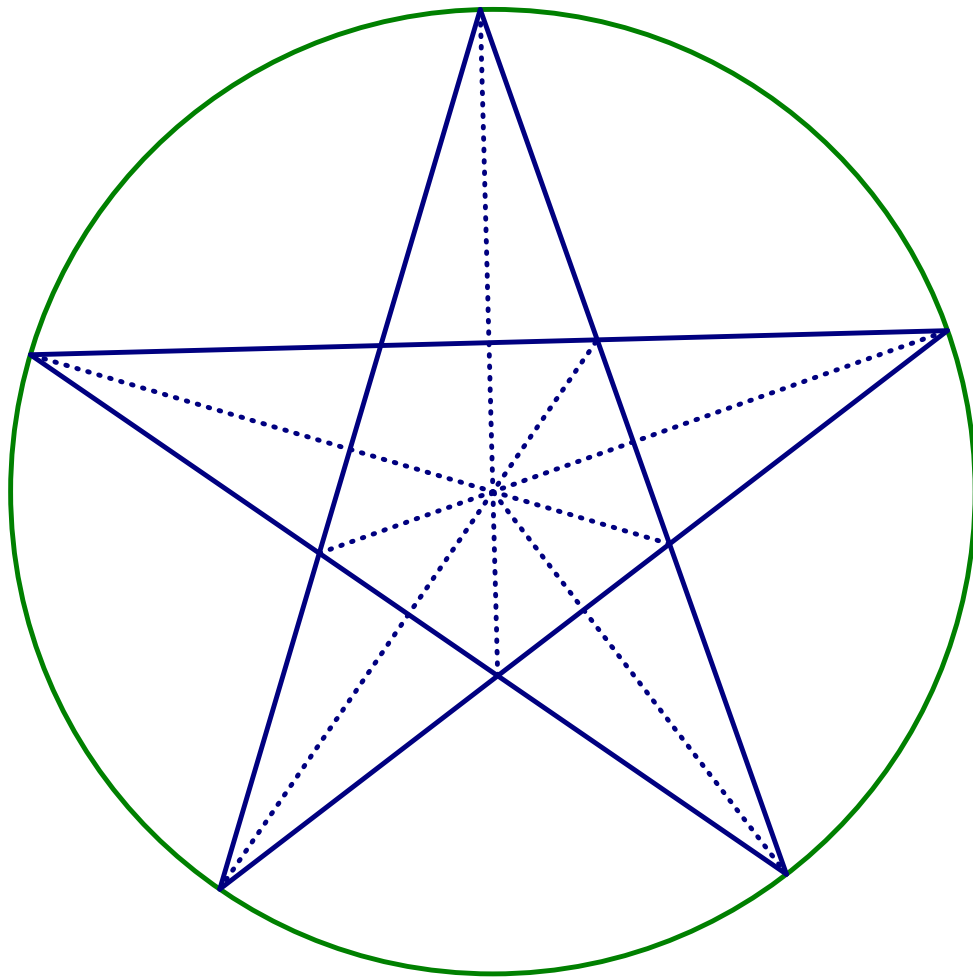
Some puffy stars we can make!



TOOLS AND SUPPLIES YOU WILL NEED

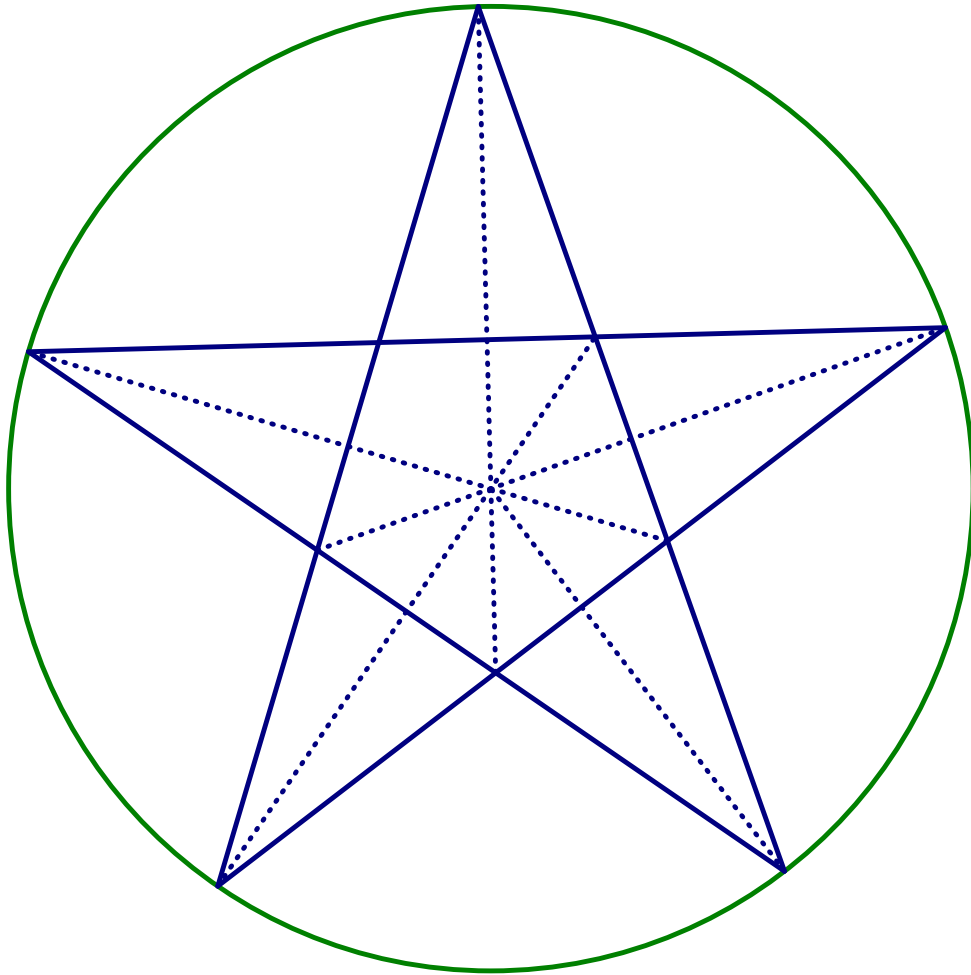
Card stock*, compass, protractor, ruler, scissors, Scotch tape, and cotton balls

*If you have been provided with nets that are already drawn, you need only a ruler, compass point for scoring, scissors, Scotch tape, and cotton balls (no protractor). And you can skip the next two slides.



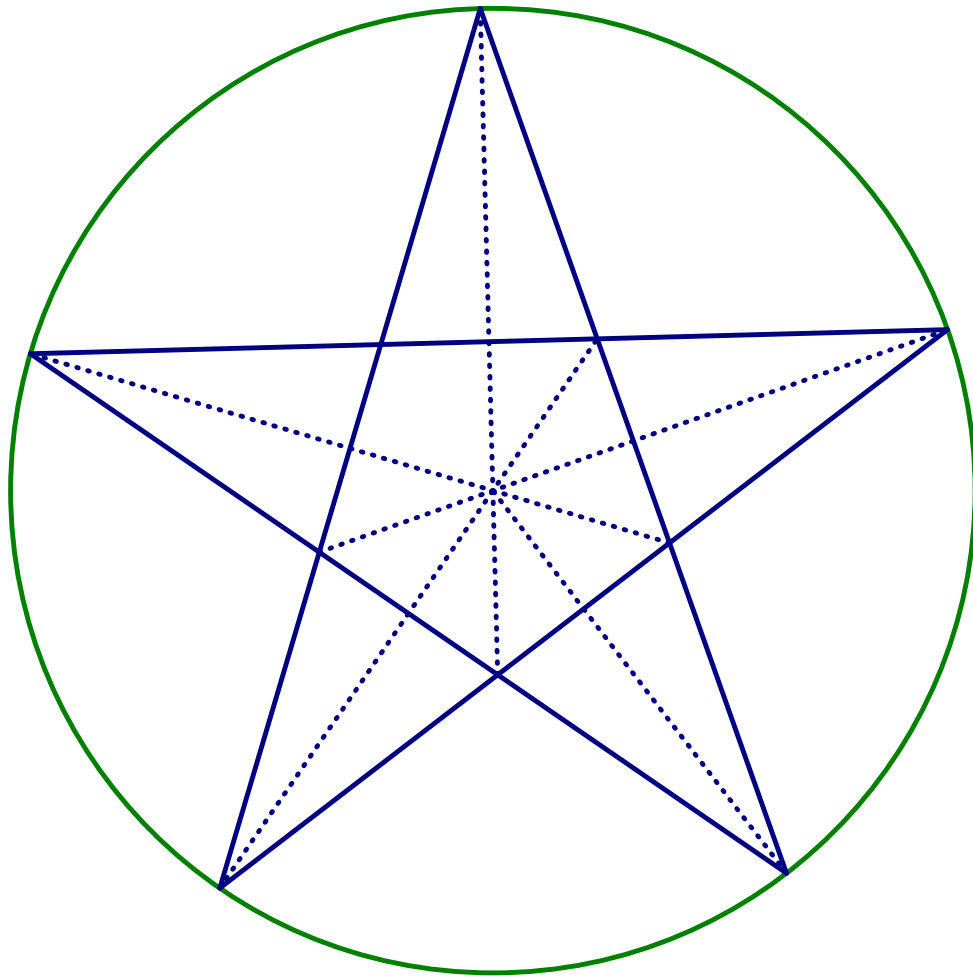
If you have nets, you may skip this and the next slide. You need 2 pieces of card stock. 5" by 8" index cards work well—draw on the lined sides. Find the center of each card. Set your compass radius at about 2.5 inches and draw a circle on each card. Be sure the radius is the same for each circle.

Skip this slide if you already have nets.



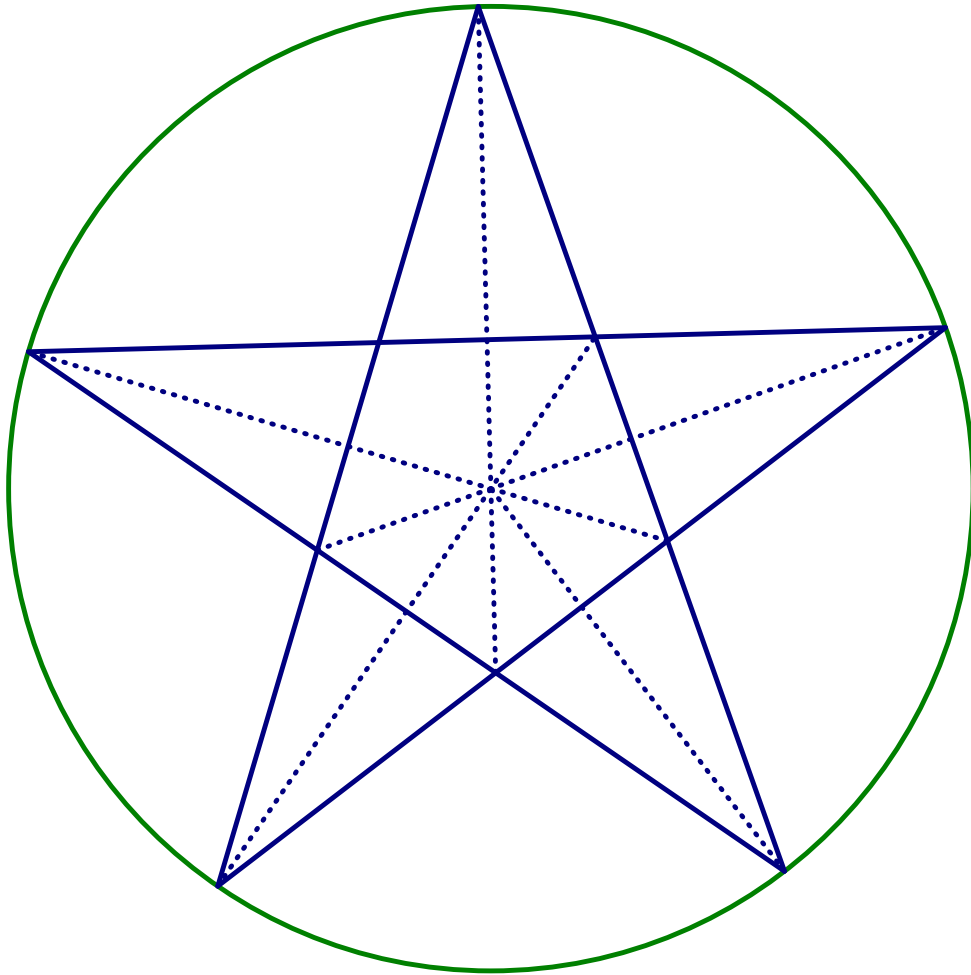
Our star has 5 points.
 $360^\circ/5=72^\circ$. Draw a light radius in the circle, and line up your protractor with 0° . Make tick marks at 72° and 144° . Flip the protractor to the other side of the radius and make 2 more tick marks, at 72° and 144° using the inner scale. Number the tick marks 1, 2, 3, 4, and 5. Connect 1-3-5-2 - 4-1. You have a 5-pointed star. Now for the interior lines.

Start here if you have nets already prepared.

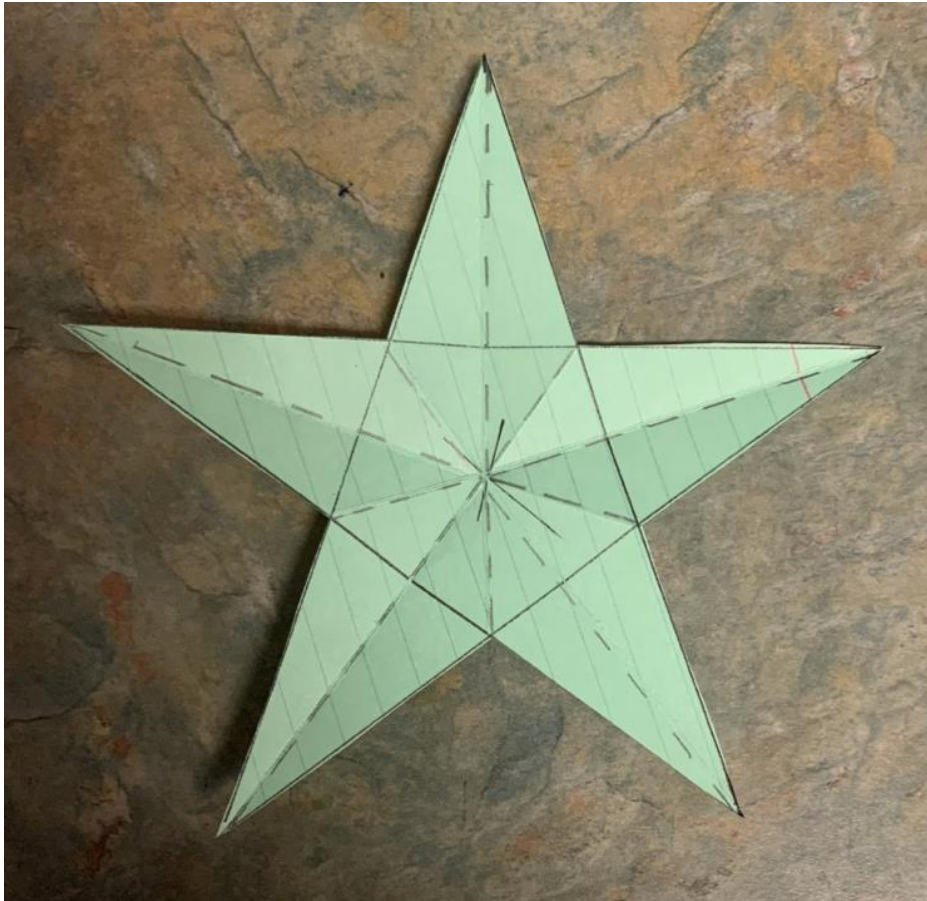


Place your ruler at each of the star's points. Use a ruler to draw a straight line from each point, through the center, to the vertex of the pentagon inside the star. These are dotted lines in the diagram.

Start here if you have nets already prepared.



Before you cut out the star, use your ruler and compass point to score along the 5 interior lines. When you fold adjacent lines “in” and “out”, this will help provide the 3-D “look”.



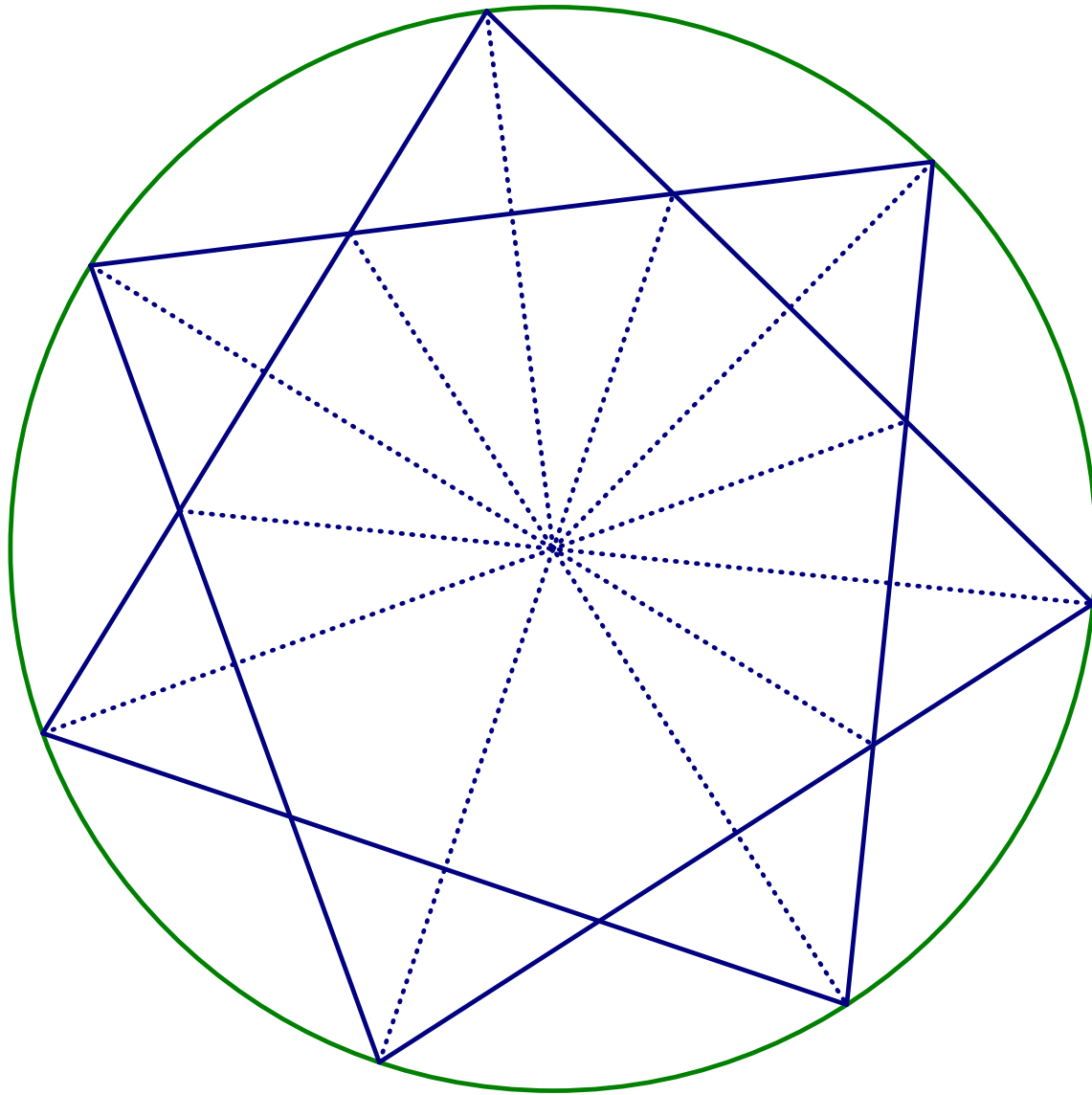
Now carefully cut out the stars. Make a prominent crease along the scored lines to provide a “puff”. Join the two stars along their borders with transparent tape. Before taping them completely together, you may stick in one more more balls of cotton. If you leave them out, and squeeze the star sideways, it makes a 3-D shape.



my star!



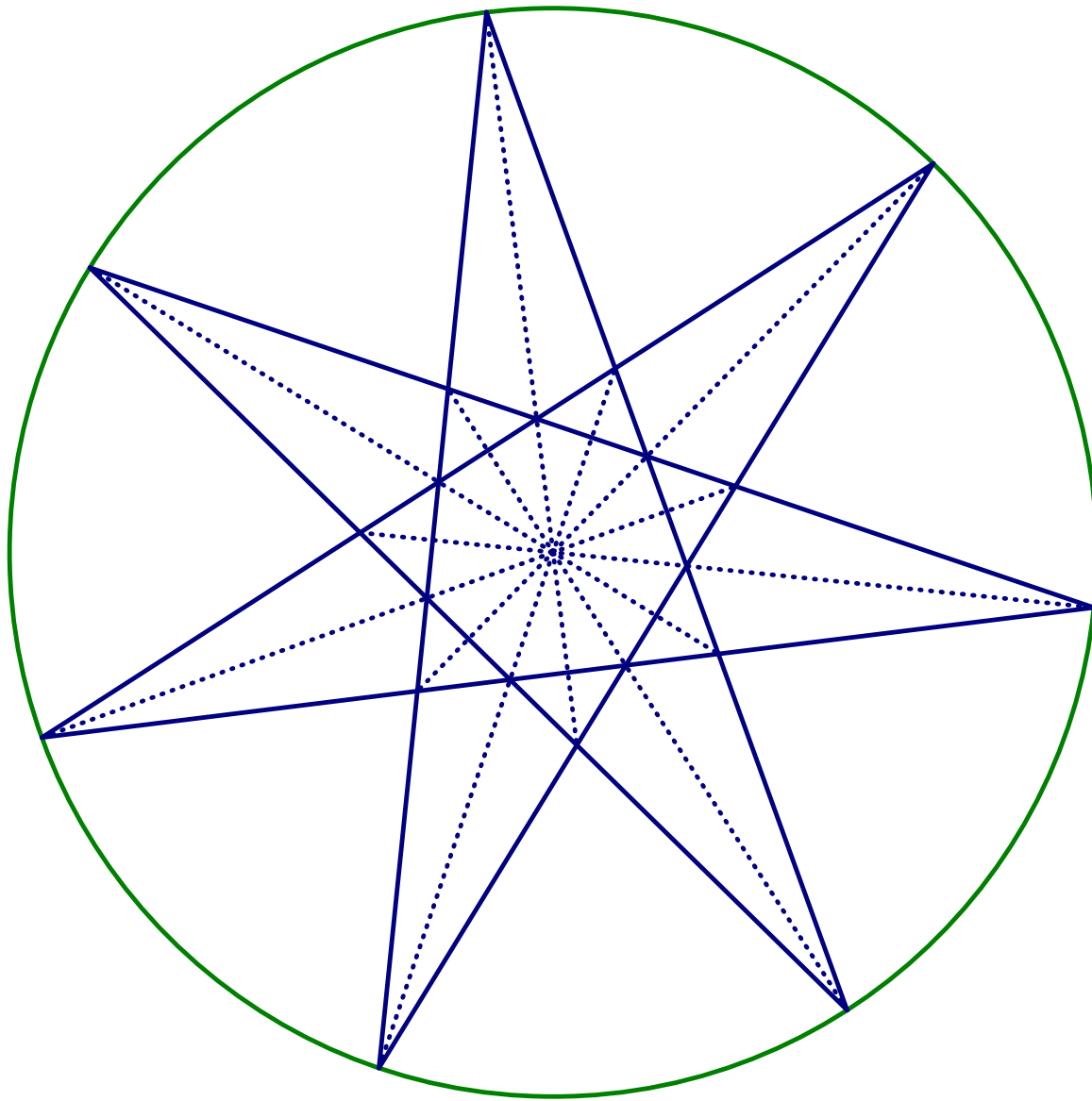
You can use a hole punch to make a hole, and tie a ribbon.



Here is a net for a 7-point “stubby” star.
 $360^\circ/7 \approx 51.5^\circ$.

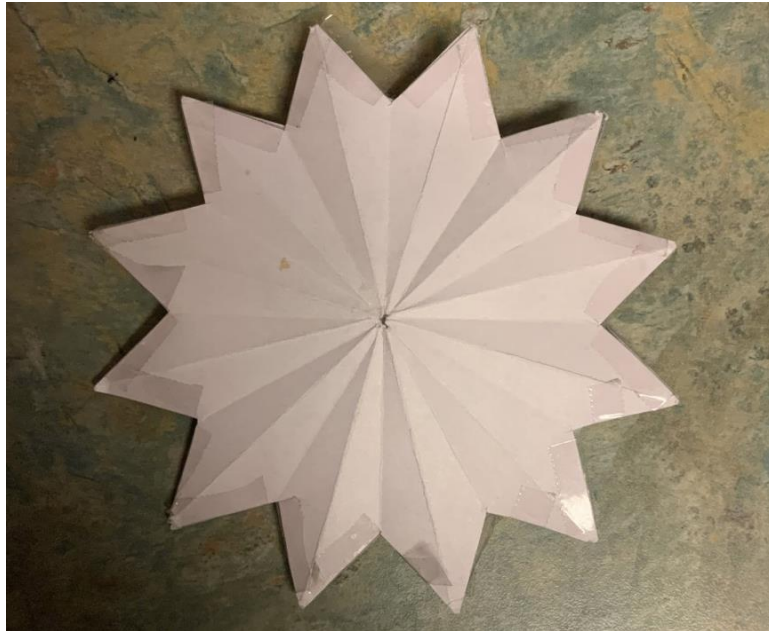
Seven tick marks should be about 51.5° apart.

Number the points 1 through 7 and connect 1-3-5-7-2-4-6-1, and proceed as before. Of course you need to make two nets exactly alike.



Here is a net for a 7-point “skinny” star. Number the points 1 through 7 and connect 1-4-7-3-6-2-5-1, and proceed as before. (Again, make two nets exactly alike!) Skinny stars take less cotton!

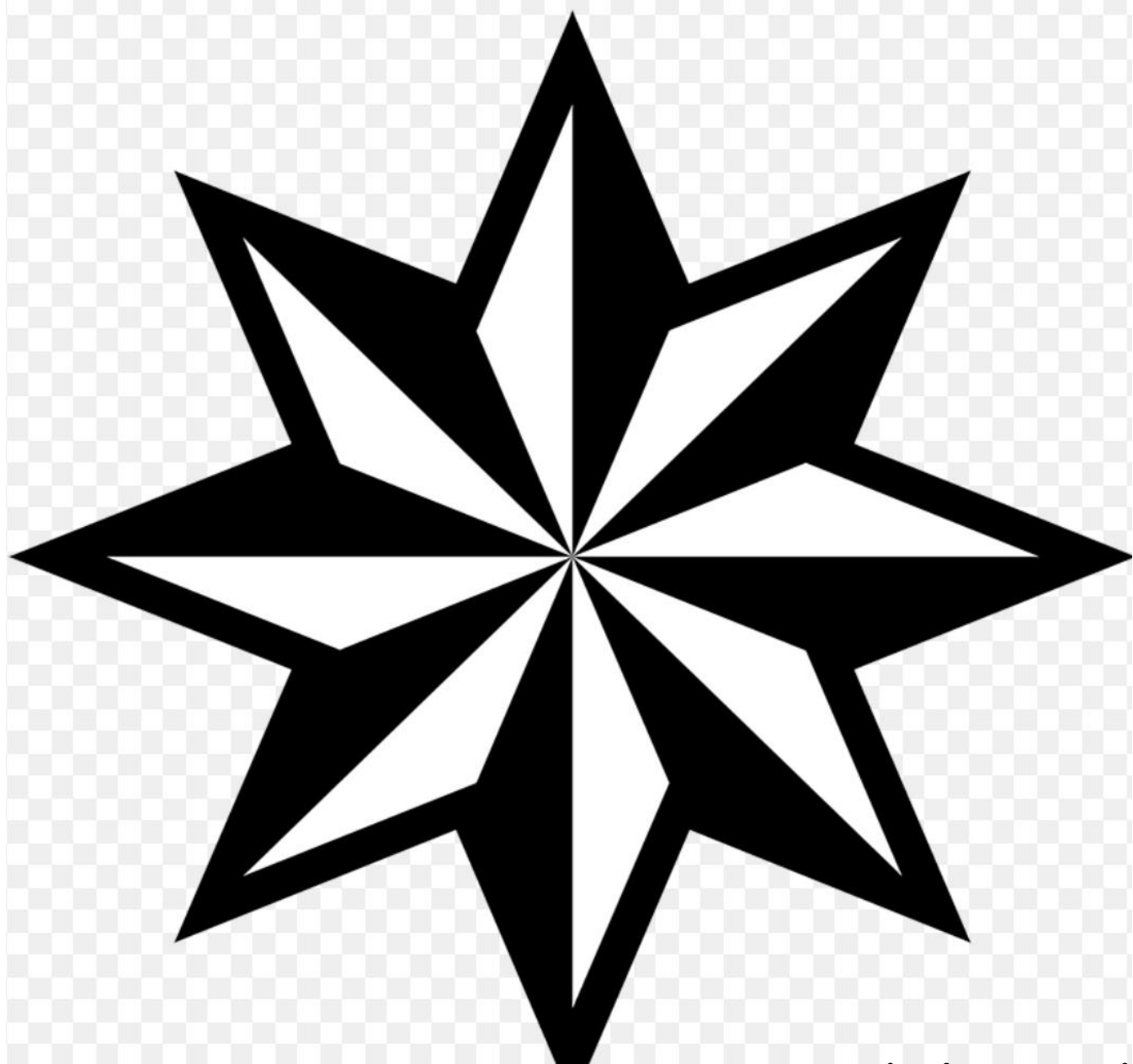
By choosing the number of points, 4, 5, 6 7, ..., and by choosing shapes from stubby to skinny, you may create a variety of stars. I made these!



12-point star (skip 3)



stubby 7-point star (skip1)



Here is an 8-point star (skip 2).



Now
it's
your
turn!

The
End