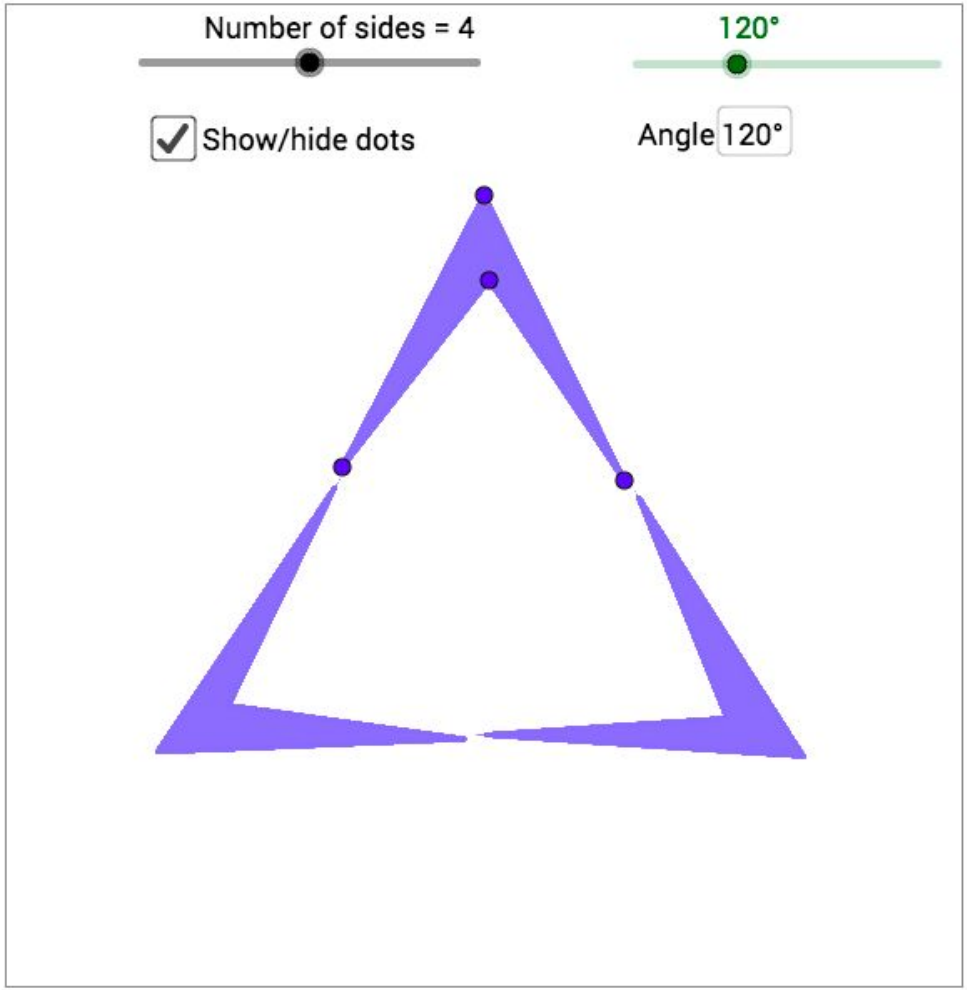
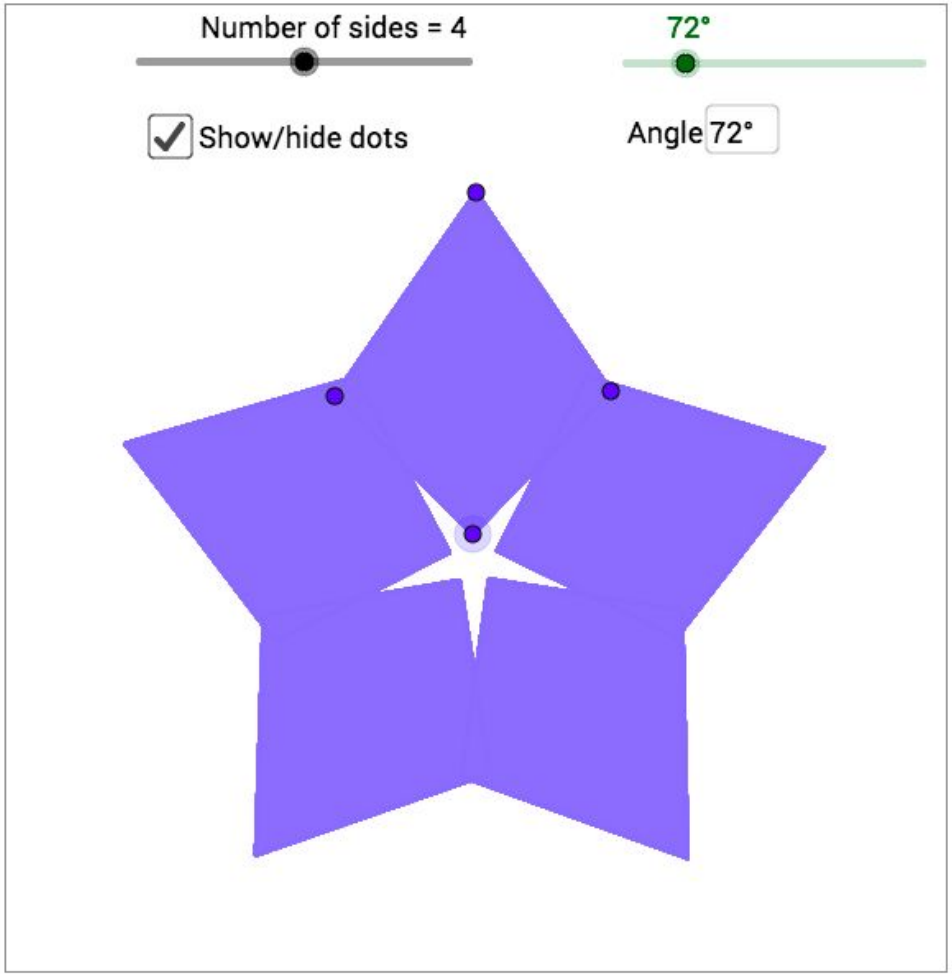
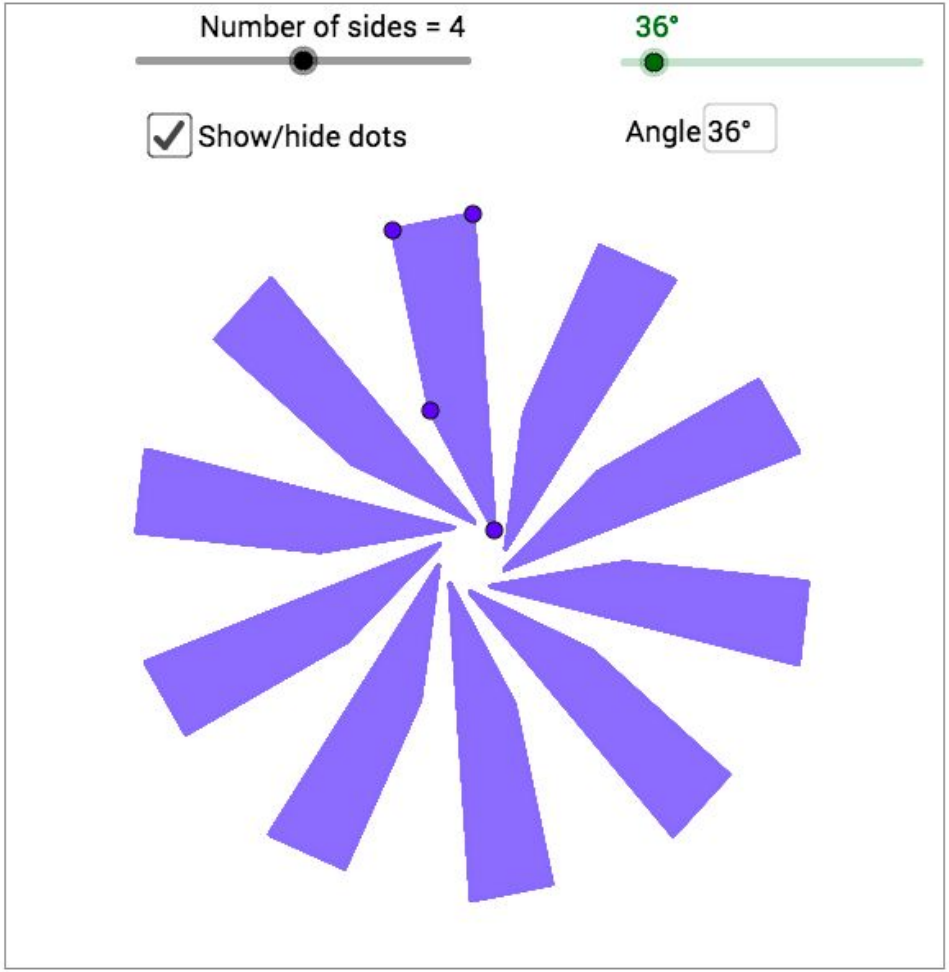
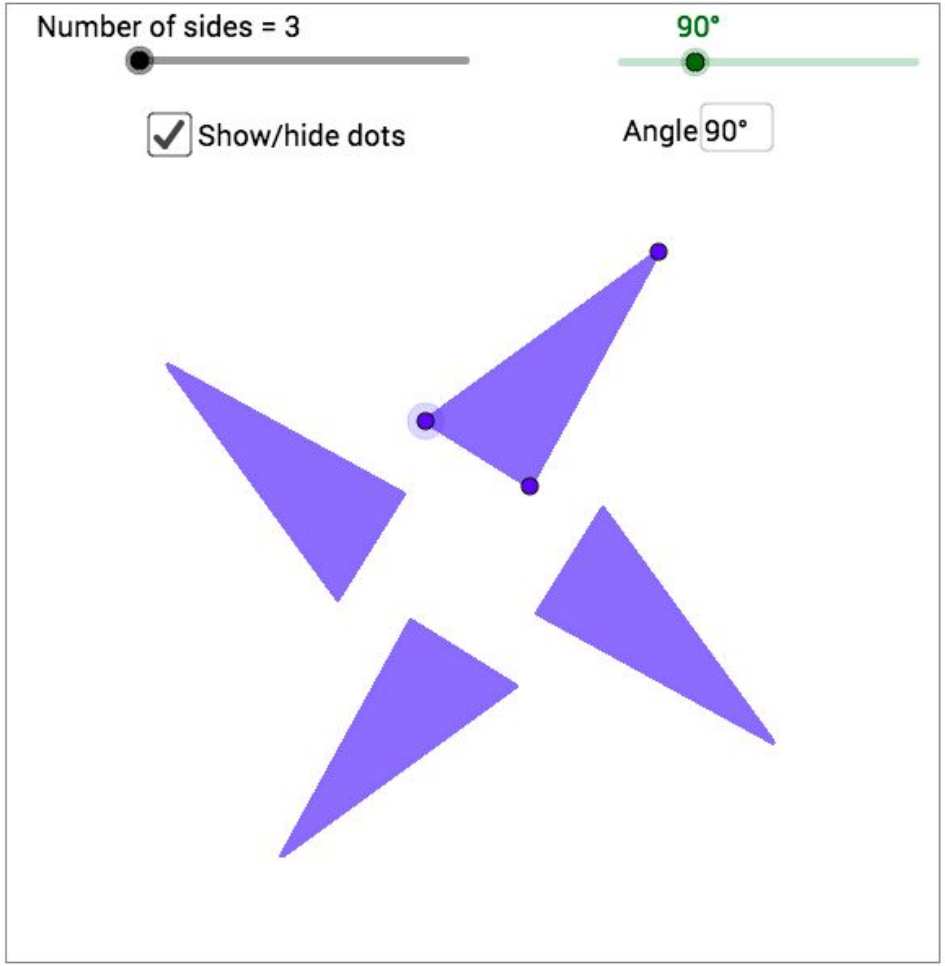
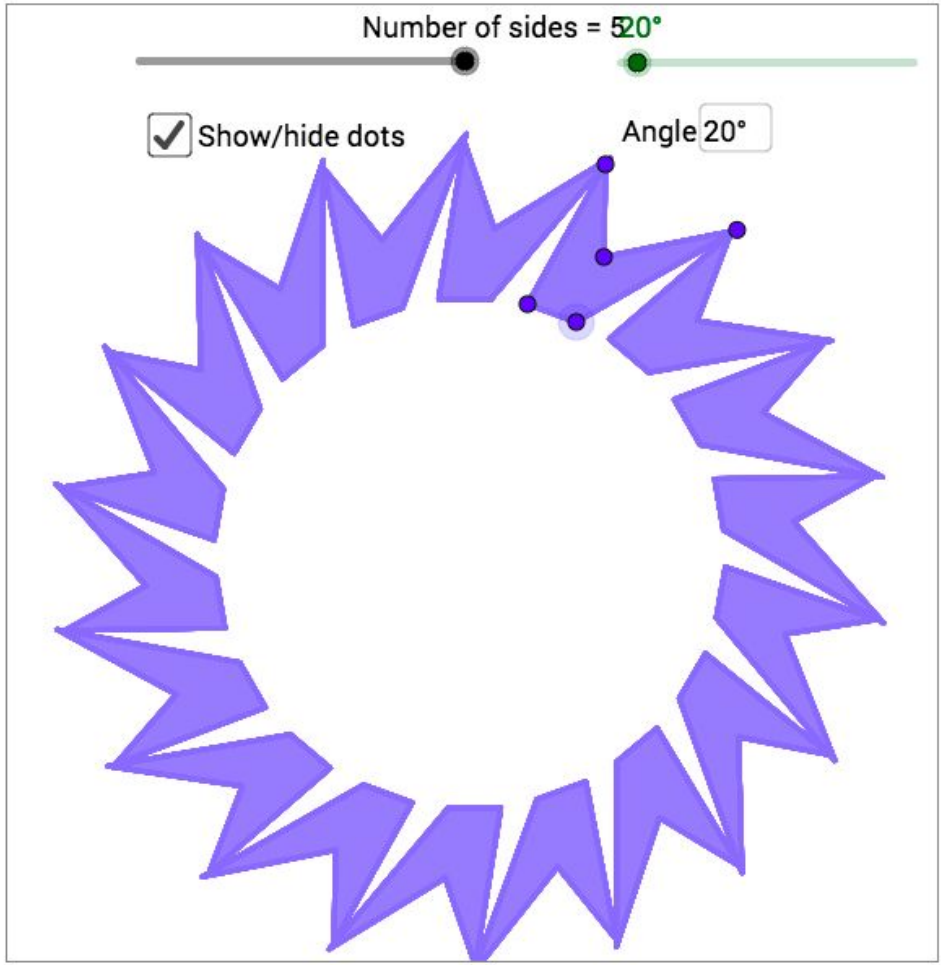
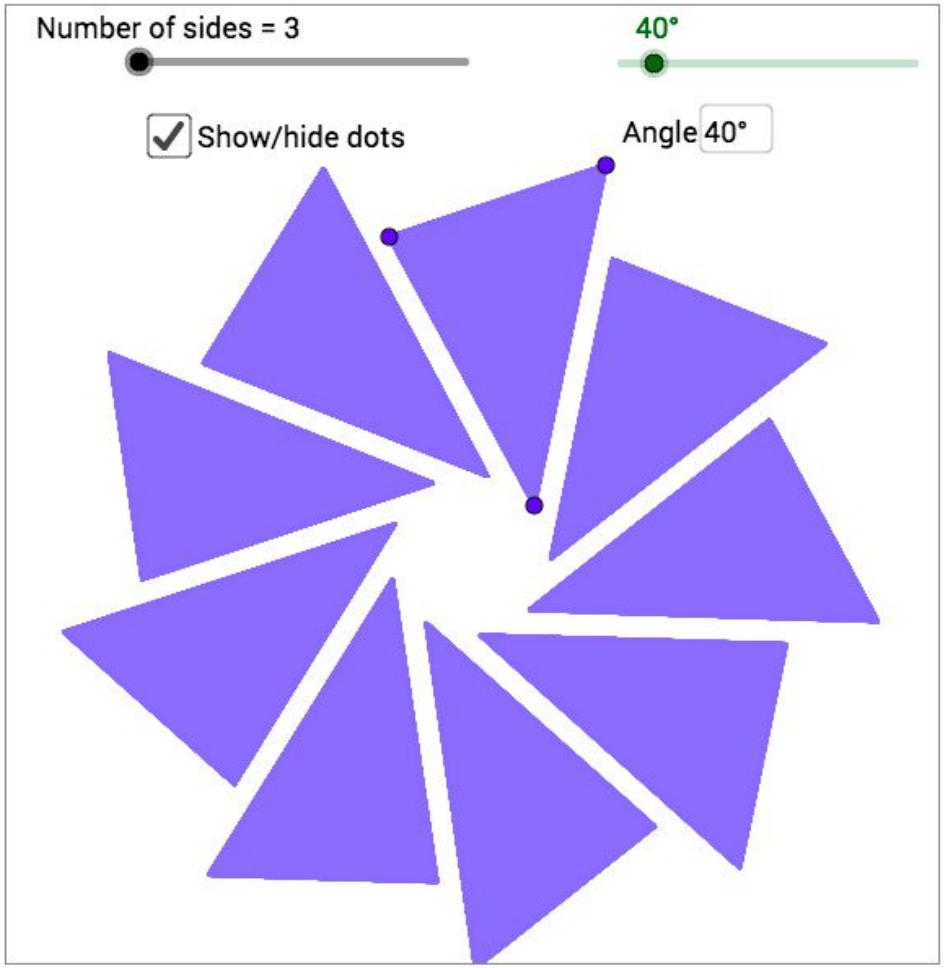

Number of sides = 4
120°
Show/hide dots
Angle 120°

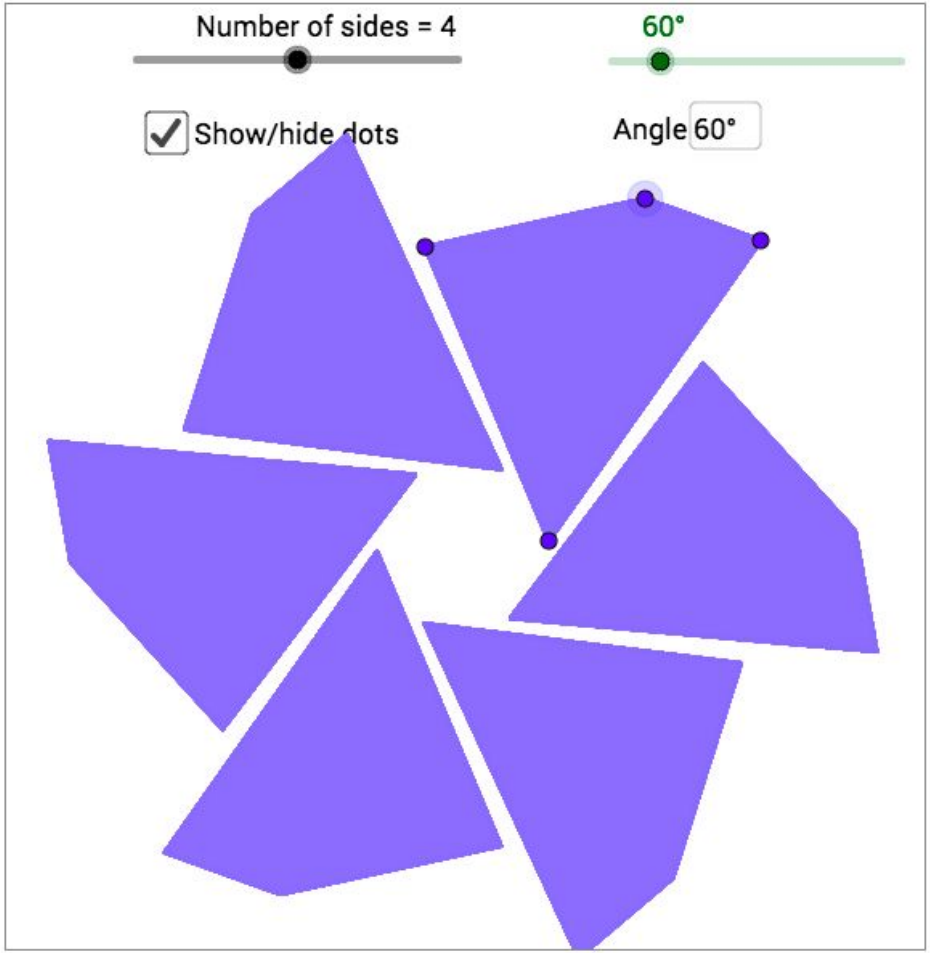

Number of sides = 4
72°
Show/hide dots
Angle 72°

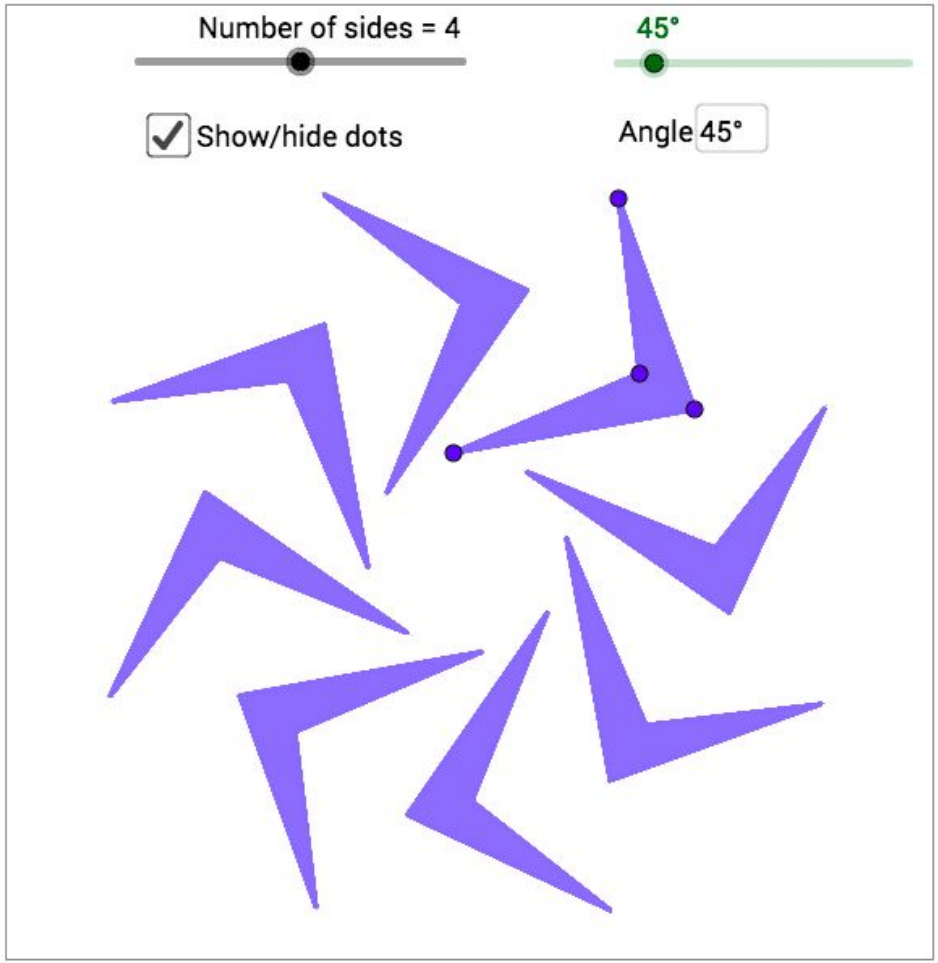

Number of sides = 4
36°
Show/hide dots
Angle 36°


Number of sides = 3
90°
Show/hide dots
Angle 90°


Number of sides = 5
20°
Show/hide dots
Angle 20°


Number of sides = 3
40°
Show/hide dots
Angle 40°


Number of sides = 4
60°
Show/hide dots
Angle 60°


Number of sides = 4
45°
Show/hide dots
Angle 45°

To make this picture, Charlie drew a kite and then told the robot to rotate it through an angle of 144°.
Alison used an angle of 216° and got exactly the same pattern!

What other angles could they have used?
The smallest angle is 72°
Multiples of 72° can also generate the same pattern

Can the other patterns be made using more than one angle?
Yes. In this picture, rotation angle of 20° generate 18 shapes.
Other angles multiple of 20 (but not multiples of 40, 60) can generate the same pattern = 100°, 140°, 220°, 260°