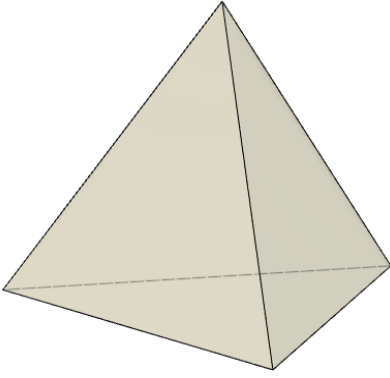
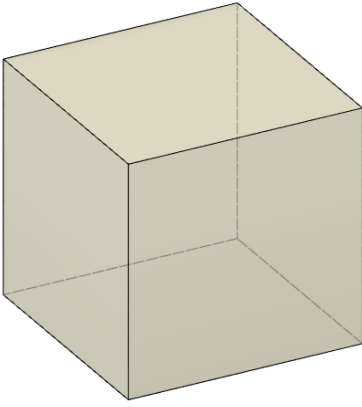
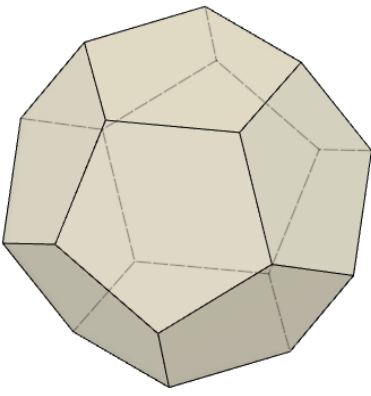
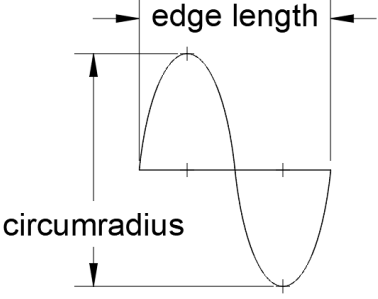
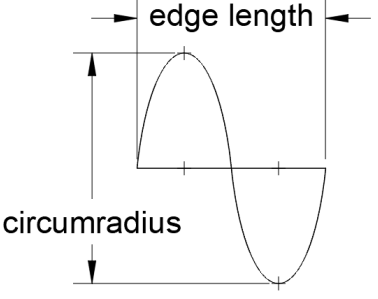
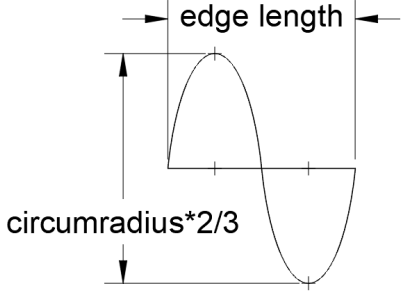
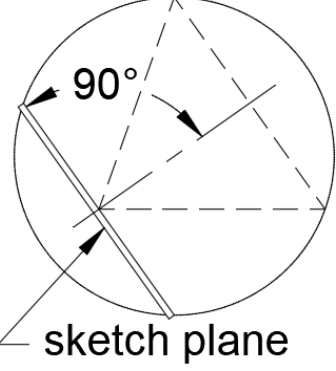
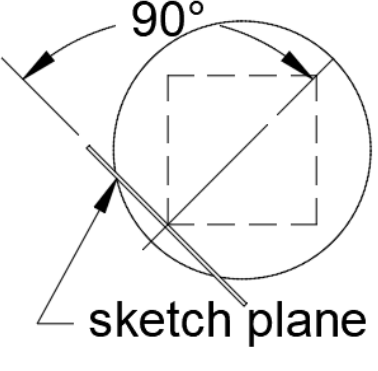
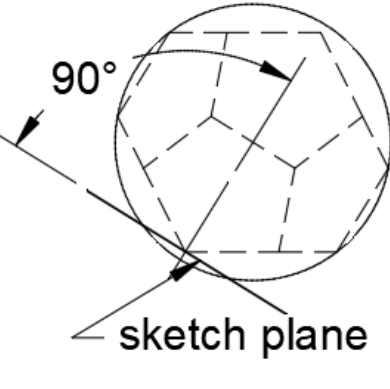
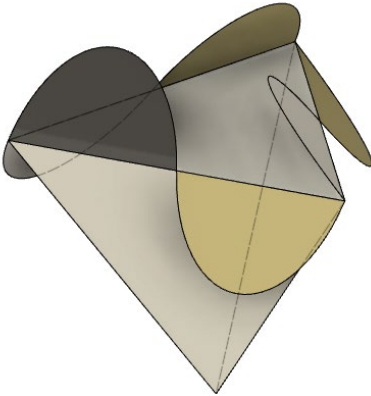
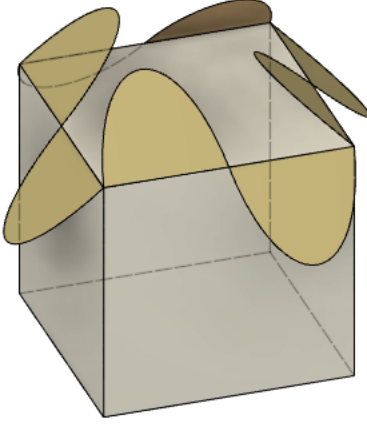
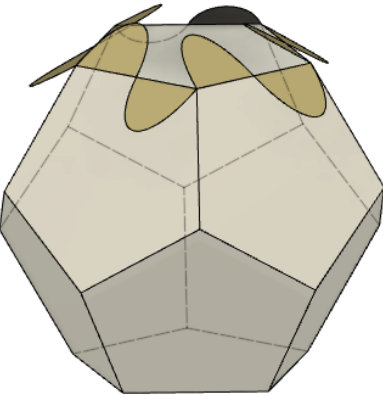
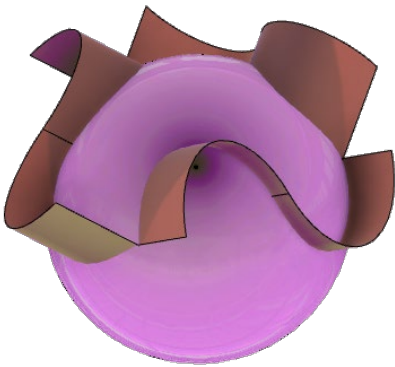
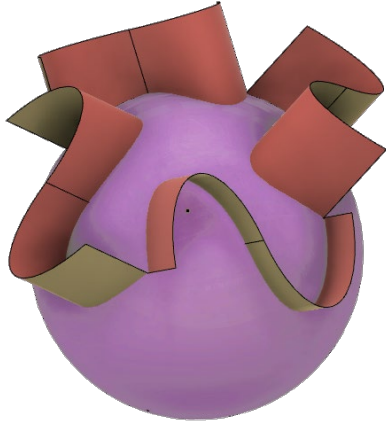
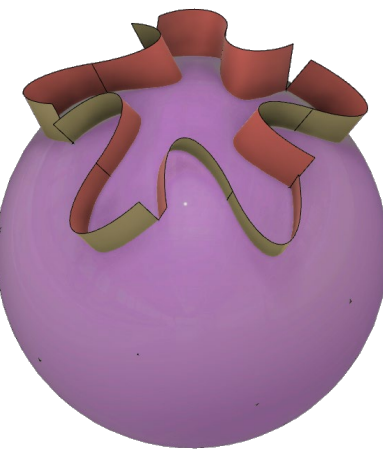
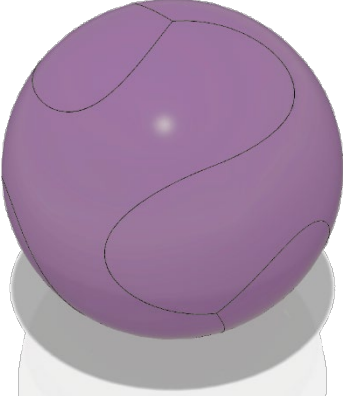


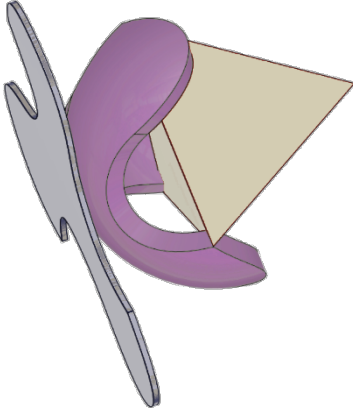
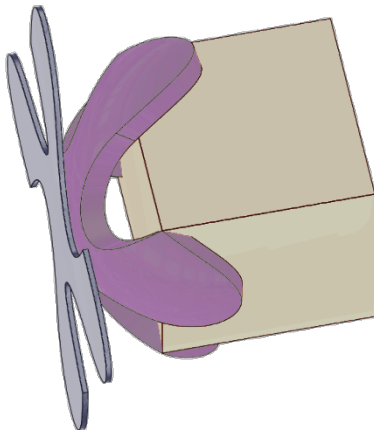
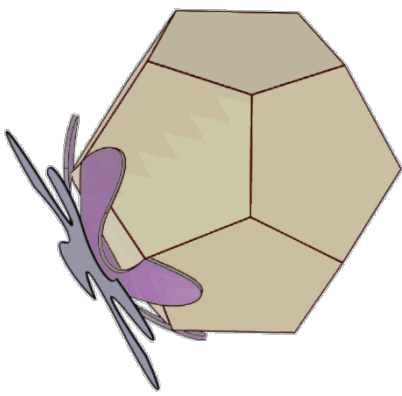


<b>Input:</b> Base platonic solid, sketch and edge length <b>Output:</b> Configurations of symmetric MSoRos in both planar (uncurled) and spherical (curled) states					
Step	Task	3 Limb	4 Limb	5 Limb	Comments
1	Select: Base platonic solid	 <b>Tetrahedron</b>	 <b>Hexahedron</b>	 <b>Dodecahedron</b>	(a) Edges $E =$ Limbs/module  (b) Faces $F =$ Modules/sphere
	(a) Limbs/module (b) Modules/sphere	3 4	4 6	5 12	
2	Select: (a) Base sketch				(a) Limb shape determined by base sketch function
	(b) Sketch plane				(b) The angle between sketch plane and face is  $\left(90^\circ - \frac{\text{dihedral angle}}{2}\right)$
	(c) Repeat for all edges of the regular polygon				(c) Sketch and plane rotation about the center of the regular polygon
3	(a) Orthographic projection: Base sketch onto the circumscribing sphere				Inverse orthographic projection  $(x, y) \rightarrow (\varphi, \lambda)$ $\mathbb{R}^2 \rightarrow S^2$  Center of projection $(\phi_1, \lambda_0)$
	(b) Spherical Tessellation: Monohedral tiling by repeating on all faces				
4	Unwrapping the sphere: Projecting onto the tangent plane				Azimuthal equidistant projection $(\varphi, \lambda) \rightarrow (x, y)$ $S^2 \rightarrow \mathbb{R}^2$  Center of projection $(\phi_1, \lambda_0)$