An isosceles triangle can have an arbitrary height.

Six are chosen whose apex falls on the center of regular polygons.

The series could be continued indefinitely.

To view the full set of color coded diagrams of sets of PolyPouches with 3-8 fold symmetry visit the first www address above.

In the following pages a set of PolyPouches with four fold symmetry are presented.
To make a PolyPouch it is best to divide a polyhedral net into equal sections and array them around a point. A section can be seen to have a bottom, middle(walls) and top. By combining the six elements above in all possible positions of bottom, middle and top many polyhedra are generated including most of the Platonic solids, regular and irregular anti-prisms and if the middle is omitted the dipyramids. Also by inserting a square in the middle regular prisms are generated.
These programs allow for the interaction of the user with traditional medieval mosaics. Two of the programs are classical arrangements that I first studied while living in Granada in 1990-1 ("Sixteen-fold" and "Petals"), the other two are original compositions using traditional tile sets. It is my intention to create an experience that allows the user to both play with the pattern and learn about its composition. Often the complexity of these tilings can be intimidating so the interface allows for the quick coloring of a smaller "controller" tiling that corresponds to and colors a larger pattern. I hope to develop many more with expanded features to share these beautiful mosaics in a way that brings out the richness of geometric beauty I have experienced in my studies.
The title and name of the painter are listed here for saved coloring or when receiving a coloring from a friend.

Using the controller tiling cycles the corresponding star variation in the tiling below.

Clicking on the tiling colors groups of tiles the color chosen in the palette.

Controls and titles can be hidden so only the tileings are visible.

Palette derived from traditional colorings of mosaics in the Alhambra.

Using the controller tiling quickly fills in the corresponding regions of the large tiling below.

Controls color cycling.

Save your coloring locally or send to a friend in an email.

Reload and manage saved coloring stored in the pull down list.