Geometry in Islamic Design - Warm Up

- Determine the symmetries of the follow shapes.
- Write line or point (rotational) symmetry below the shape.
- For line symmetry, draw dotted lines on the shapes where the line symmetry exists (you may find more than 1).
- For point symmetry, draw a point for the center of rotation.

1. 
2. 

3. 
4. 

Symmetry ___________________ Symmetry ___________________
Name of Polygon _______________ Name of Polygon _______________
Regular? ___ Regular? ___

5. Are any of the shapes similar? ___________________
Creating Islamic Designs

Create an Islamic design with colored pencils that includes all three types of transformations (translations, rotation, and reflection). Color the entire grid.

Why does your design represent an Islamic pattern?

Are there any reflectional/rotational symmetries or translations in your design?