

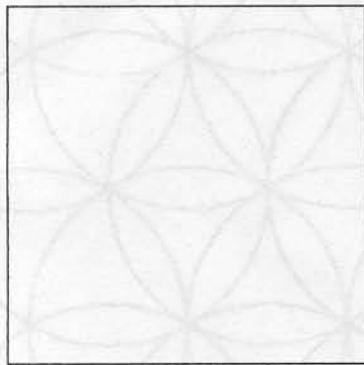
Name _____

Date _____

Geometry in Islamic Design - Warm Up

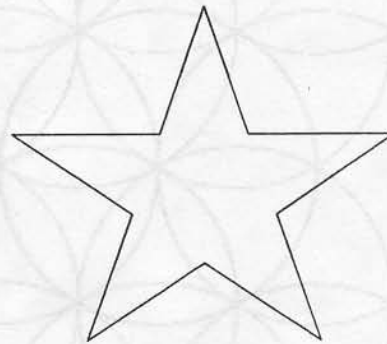
- Determine the symmetries of the follow shapes.
- Write *line* or *point (rotational)* symmetry below the shape.
- For line symmetry, draw dotted lines on the shapes where the line symmetry exists (you may find more than 1).
- For point symmetry, draw a point for the center of rotation.

1.



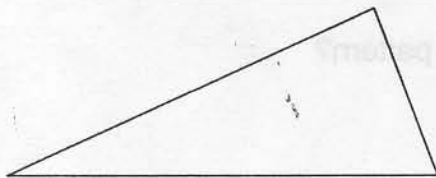
Symmetry _____
Name of Polygon _____
Regular? ____

2.



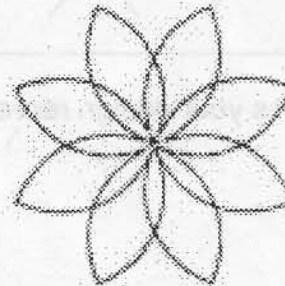
Symmetry _____
Name of Polygon _____
Regular? ____

3.



Symmetry _____
Name of Polygon _____
Regular? ____

4.



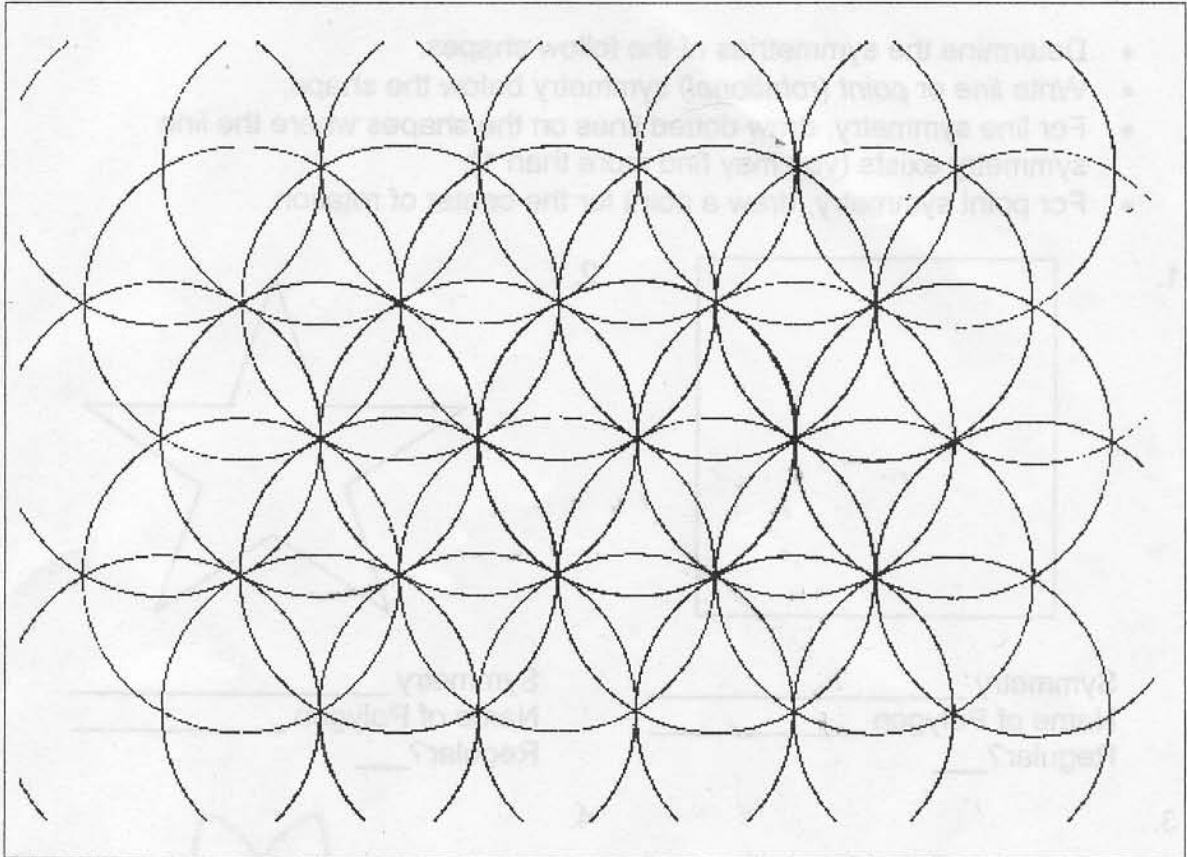
Symmetry _____

5. Are any of the shapes similar? _____

Name _____ Date _____

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 represents an Islamic pattern?

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