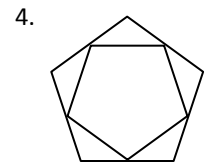
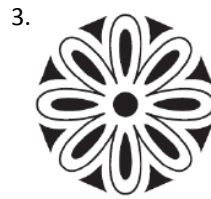
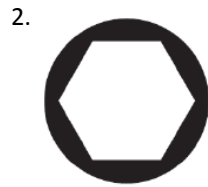
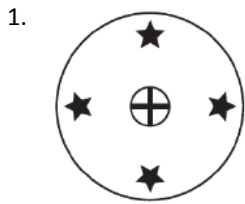


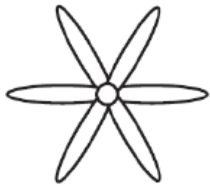
**Unit 10.6 worksheet Rotational and line Symmetry**

Determine whether the figure has rotational symmetry. If so, describe the rotations that map the figure onto itself.



Does the figure have the given rotational symmetry?  
If not, does the figure have any rotational symmetry and what is it?

5. 120° rotation



6. 180° rotation



7. 45° rotation



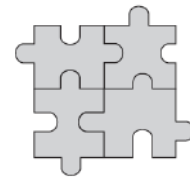
8. 36° rotation



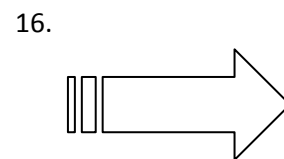
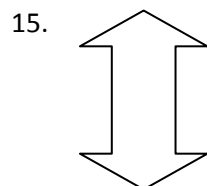
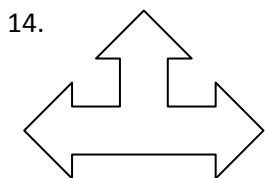
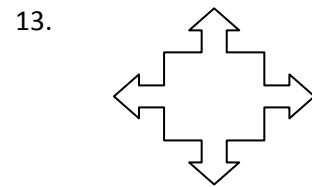
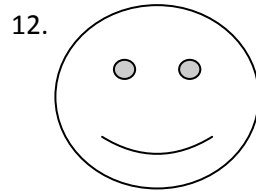
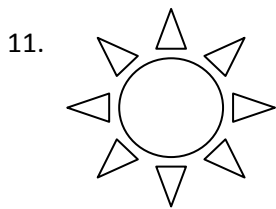
9. 180° rotation



10. 90° rotation



Determine whether the figure has rotational symmetry. If so, describe any rotations that map the figure onto itself. Then draw in any line symmetry lines.



Draw a figure for the given description. If it is not possible, then write "not possible".

17. A triangle with exactly two lines of symmetry

18. A quadrilateral with exactly two lines of symmetry


19. A pentagon with exactly two lines of symmetry


20. A hexagon with exactly two lines of symmetry


21. An octagon with exactly two lines of symmetry

22. A quadrilateral with exactly four lines of symmetry

Determine whether the entire word has line symmetry and whether it has rotational symmetry. Identify all lines of symmetry and angels of rotation that map the entire word onto itself.

23.  Line of Symmetry? YES or NO  
If YES, then draw in line(s) of symmetry  
Rotational Symmetry? YES or NO  
If YES, then describe the rotational symmetry: \_\_\_\_\_

24.  Line of Symmetry? YES or NO  
If YES, then draw in line(s) of symmetry  
Rotational Symmetry? YES or NO  
If YES, then describe the rotational symmetry: \_\_\_\_\_

25.  Line of Symmetry? YES or NO  
If YES, then draw in line(s) of symmetry  
Rotational Symmetry? YES or NO  
If YES, then describe the rotational symmetry: \_\_\_\_\_