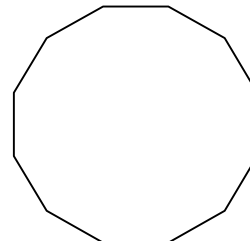


Name _____ Date _____ Period _____ Score _____

Sec 1H Unit 8 Day 3 Symmetries of Regular Polygons Assignment



1. Draw a shape with a diagonal that is not also a line of symmetry:
2. Draw a regular octagon then draw all the lines of symmetry on it:
3. Draw a pentagon that is NOT a regular pentagon, then draw one diagonal on it.
4. Find the initial angle of rotation, then all other angles of rotation for this regular 12-sided polygon:



5. How many lines of symmetry for a regular 20-gon?
List the initial angle of rotation, and all the other angles of rotational symmetry for a regular 20-gon.
6. How many lines of symmetry for a regular 15-gon?
List the initial angle of rotation, and all the other angles of rotational symmetry for a regular 15-gon?
7. How many sides does a regular polygon have that has an angle of rotation equal to 18° ?
Explain.
8. How many sides does a regular polygon have that has an angle of rotation equal to 20° ?
How many lines of symmetry will it have?

For each of the following logos:

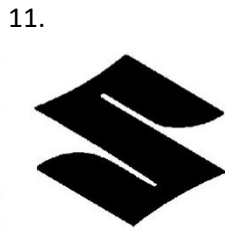
- a) Draw all lines of reflection.
- b) Mark the center of rotation and give the initial angle of rotation.
- c) List all other angles of rotation less than 360 degrees.



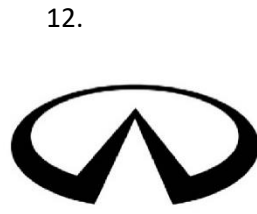
- a. How many lines?
- b. initial angle:
- c. other angles:



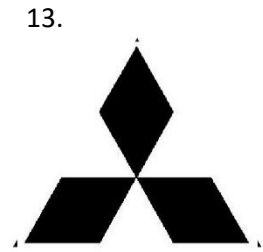
- a:
- b:
- c:



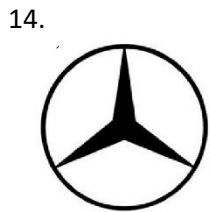
- a:
- b:
- c:



- a:
- b:
- c:



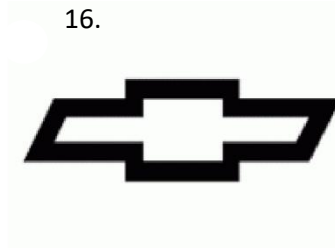
- a:
- b:
- c:



- a. How many lines?
- b. initial angle:
- c. other angles:



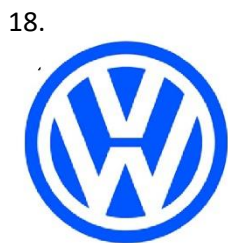
- a:
- b:
- c:



- a:
- b:
- c:



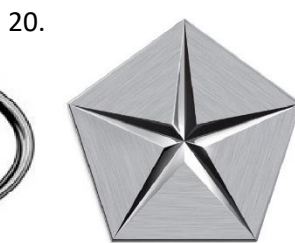
- a:
- b:
- c:



- a. How many lines?
- b. initial angle:
- c. other angles:



- a:
- b:
- c:



- a:
- b:
- c:



- a:
- b:
- c:



- a:
- b:
- c:

You have brains in your head.
 You have feet in your shoes.
 You can steer yourself any
 Direction you choose.
 Dr. Seuss