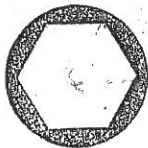
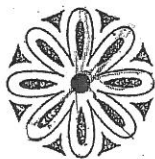


1. Describe any rotations that map the figure onto itself (give the degree of the interval).

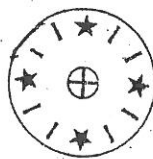
a.



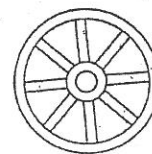
b.



c.

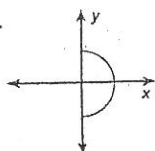


d.

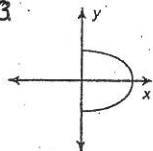


#2-5, SOLIDS: Imagine the (4) plane regions rotated around the y-axis (spun quickly). Which solid at right would be formed?

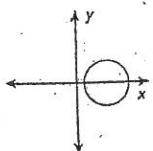
2.



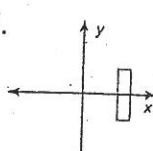
3.



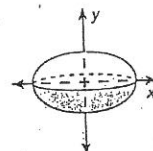
4.



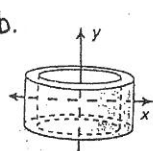
5.



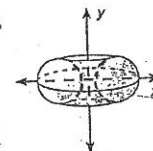
a.



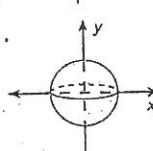
b.



c.



d.



#6-8, Use a protractor and a straightedge to construct the specified rotation.

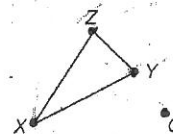
6. Point X, 135° clockwise about O.



7. 90° counterclockwise



8. 180°



#9-14, Use the diagram at right to find the image of the segment or triangle after it has been rotated.

9. 90° clockwise of BC about O.

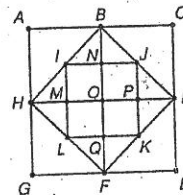
10. 90° counterclockwise of QL about O.

11. 90° clockwise of JD about O.

12. 90° counterclockwise of OM about O.

13. 180° of $\triangle DEF$ about O.

14. 180° of NJPO about O.



#15-20, Describe all symmetry of the figure (i.e. How many lines and what degree interval?)

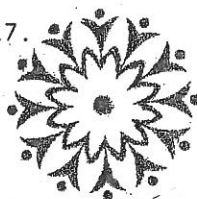
15.



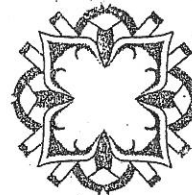
16.



17.



18.



19.

