



In a round robin tournament each team plays every other team exactly once. Assume that teams play once a week.

Devise a schedule for a tournament involving six teams considering each team as the vertex of a hexagon. When 2 teams play each other connect corresponding vertices. For the first week, schedule teams so the segments connecting them have different lengths. Then each week thereafter, rotate the segments one-sixth of the way around the hexagon and use the resulting segments to make up the schedule. Extend this idea to schedule tournaments for 7 teams, 9 teams, and 10 teams.

Make charts showing the schedules you have devised along with a drawing of the polygon at each step in the process. Include a report comparing the number of weeks it takes to schedule the differing number of teams. Display your work in the classroom.