tournaments can be found in print, but in recalling them, the memory may play tricks on one while he is in the process of making a tournament and his reference book is elsewhere. For tournament drawings using 4 to 12 teams see appendix. For finding the number of games necessary to play for any round robin, substitute into the formula, N(N-1). For example, a 12 team round means $12(12-1=12 \times 11=2)$

66 games. If you do not have the time or facilities to play 66 games some method other than the round robin must be used.

Combination Round Robin

A combination round robin and elimination tournament could be worked by dividing the 12 teams into 2 leagues of 6 teams. By applying the formula one can see that it would take 15 games for each league to play a round robin schedule. The two highest in each league could enter an elimination tournament and a championship could be reached in 3 additional games, or in this case, a total of 33 games would reach a championship. By this method no team would be eliminated until it had played at least 5 games. In other words, don't put many teams in a single league if the number of games must be held down.

Double Round Robin

In case of a smaller league like a 6 team league, where 5 games each are not enough, a double round can be played. This involves the playing of the same schedule over, thus allowing each team to play 10 games.

Partial Round Robin

Dr. Elbel of the University of Kansas has a scheme for playing a partial round robin tournament that works out well. For instance, a 44 team group will be divided into 4 leagues of eleven each and then a partial round is played in which each team plays 6 games in its league. The two or three teams standing the highest in their league are placed in the play off elimination tournament where a sport championship is determined. For drawings of the partial tournaments, see the appendix.

Single Elimination Tournament

The single elimination tournament is used when a quick championship is desired. The formula (N-1) will quickly tell how many games are necessary to be played to finish the contests. For example with 13 teams, substitute in the formula, 13-1= 12 games. In the actual drawing of a tournament some multiple of 2 must be used. For example, 4, 8, 16, 32, 64, etc. If you wish to play "N" teams then the next larger multiple of two must be used in the drawing. If N=9, 13, or 16, a 16 team drawing must be used. If N=17, 21, or 30, a 32 team drawing is used. Assuming a 13 team contest the procedure would be as follows: (see figure 1)

- 1. The number of byes is determined by subtracting the number of teams from the multiple of 2 used. In this case 16-13=3 byes.
- 2. Place the byes on the drawing sheet so that an even number of byes is in the upper and lower halves of the tournament. In case of an odd number of byes the smaller number goes to the top. In this case, with 3 byes, one is placed on the top line and two are placed in the lower half as shown on the drawing sheet.
- 3. The 13 teams, numbers, or names are placed in a container and are drawn and placed in the remaining lines. The names are shown as letters with teams A, E, and D, advancing to the second round by virtue of drawing the bye positions.