A Problem for the participants of the High-School Mathematics Program at Notre Dame

Dear Students!

Here I have a problem for you, which I hope you will find entertaining, even if a general solution may perhaps be difficult.

A club having an even number 2n of members meets on nevenings. They are seated in a linear series at one side of a straight table. How can the 2n members be placed at the table on these n occasions so that everyone just once has anyone else as a neighbor?

Another club having an odd number 2n + 1 of members also meets on n evenings. They are seated in a circle round a round table. How can they be placed at the table so that everyone gets everyone else just once as a neighbor?

Th. Skolem

The Skolem