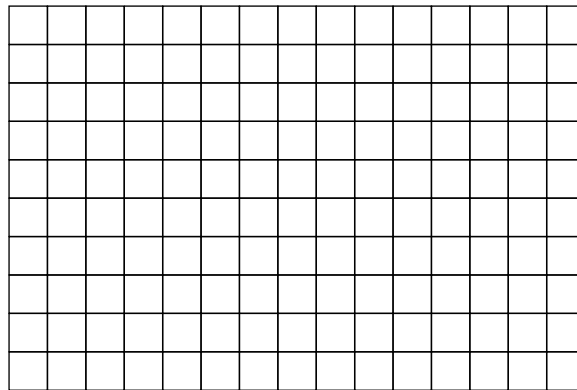


PLANNING A TEA PARTY

Your class is going to host a tea party for their parents. There are going to be 44 parents coming. As part of the planning you have to arrange some tables in the school library. Luckily the school has lots of tables. The problem is that they are all quite small. Each table is square and can seat 4 people (one on each side). The good news is that the tables can be put together to make larger tables. Your teacher has decided in order for the parents to meet some other parents that there must be at least six people to every table. A map of the library is provided for you (each square is the size of one table). To help you design your seating arrangement there are a few things you need to know.

1. Tables that are put together are considered to be ONE table no matter what the shape is.
2. People need room to sit. How much room? On the map one square is enough room for one person to sit.
3. Servers need room to walk behind each seat so they can serve the parents. They need to have a path that is one square wide to walk on.
4. Tables cannot be placed against the walls.



Library

How will you arrange the tables to fit everyone? Why is your arrangement of tables, the best arrangement that can be made for the 44 parents in the library?

