

Table For Forty

Seating Rules:

Only one person can sit at each side of a square table.

You may not leave any possible seat empty.

Goal:

Figure out all of the ways that forty guests can be seated according to the seating rules above.

To do:

Draw or make a list of all of the ways you can seat 40 people at square tables. Notice that the number of people who can sit at a table changes when the tables are pushed together or rearranged.

To answer:

What is the greatest number of tables that will seat forty guests according to the rules above?

What is the smallest number of tables that will seat forty guests according to the rules above?

What seating arrangement would you choose? Why do you think this would be the best way to seat your guests?

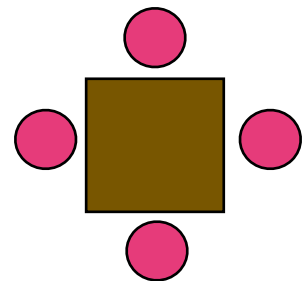


Table for four

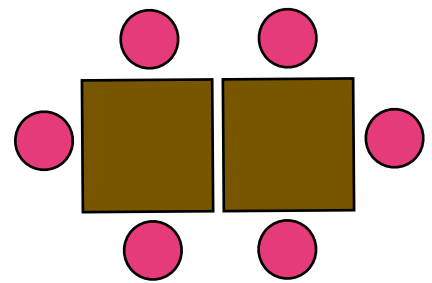


Table for six

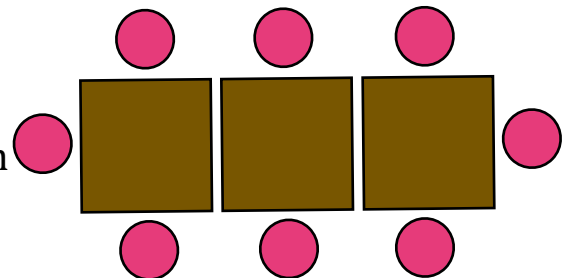


Table for eight

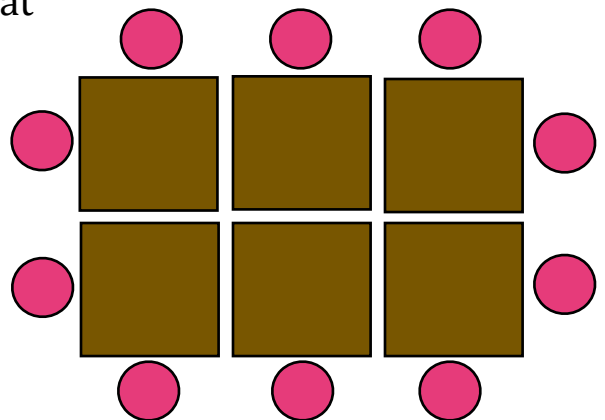


Table for ten