1. List all of the truth assignments for 4 variables: \( p, q, r, \) and \( s \). I suggest creating a table for 1 variable, extending it to 2 variables, extending that to 3 variables, and then to 4 variable. That is, I suggest you devise a repeatable pattern for creating larger and larger truth assignments.

2. Pretend you were given a list of 1000 cities. Pretend you were to make a table of True or False values that depended on the statement: “There is a direct road from city A to city B.” (Direct meaning the road does not go through any other city.

(a) How large (how many rows and how many columns) would your table have?

(b) How many different tables are possible?