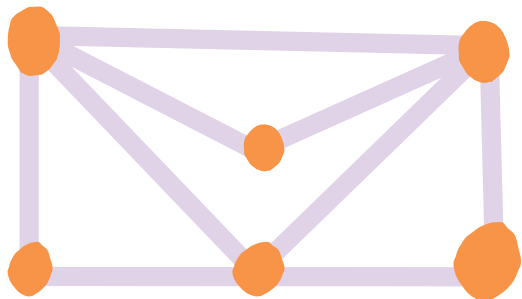
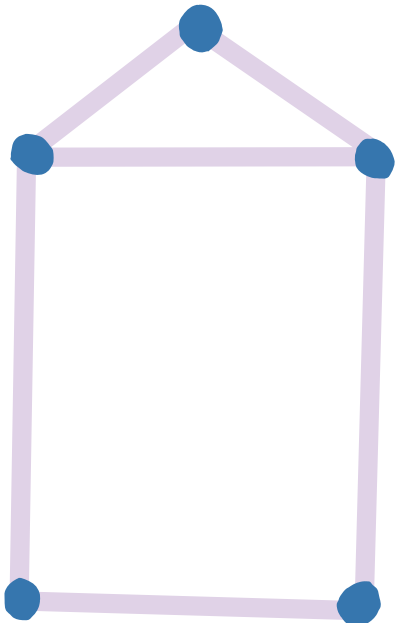
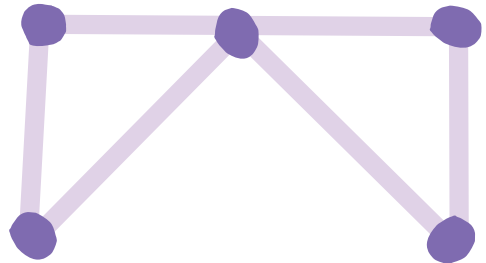
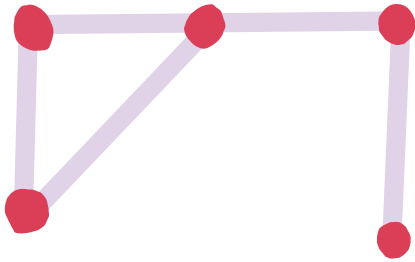


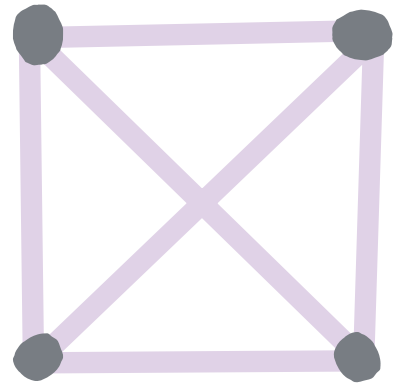
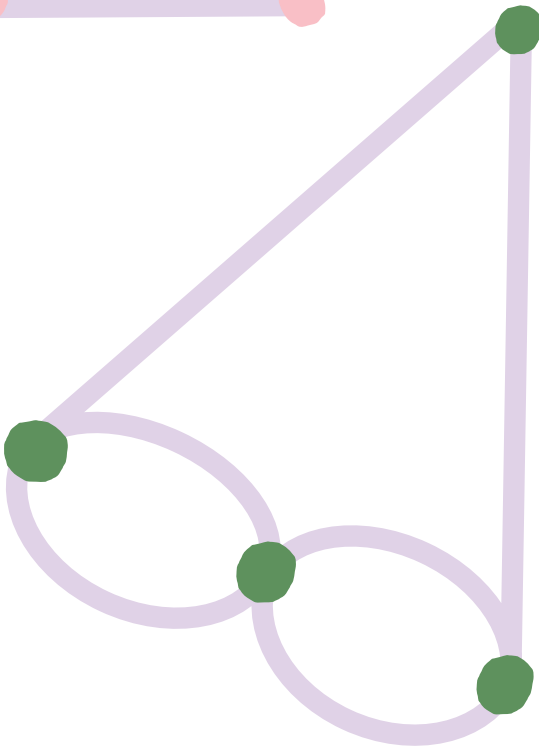
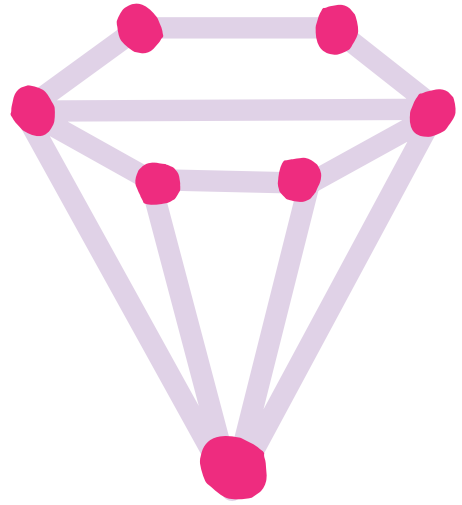
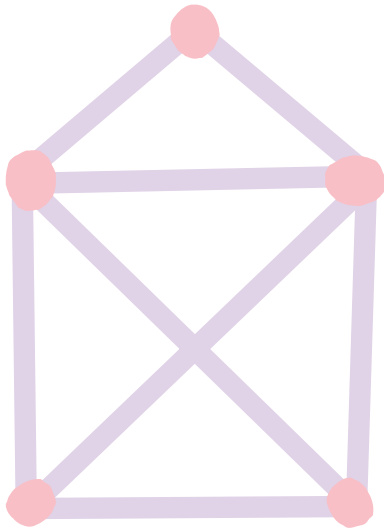
# PATHS AND CIRCUITS

This type of problem was discovered by the great Swiss mathematician Leonhard Euler

Draw these shapes without lifting your pencil and without retracting any lines. Not all the shapes have a solution!



Count how many paths leave each vertex. Do you notice something?



## DISCUSS



Computer Scientists call these kinds of problems graph problems. The most famous graph problem is from 1735 and was called Seven Bridges of Königsberg, with the goal of walking through the city crossing each of those bridges once and only once.