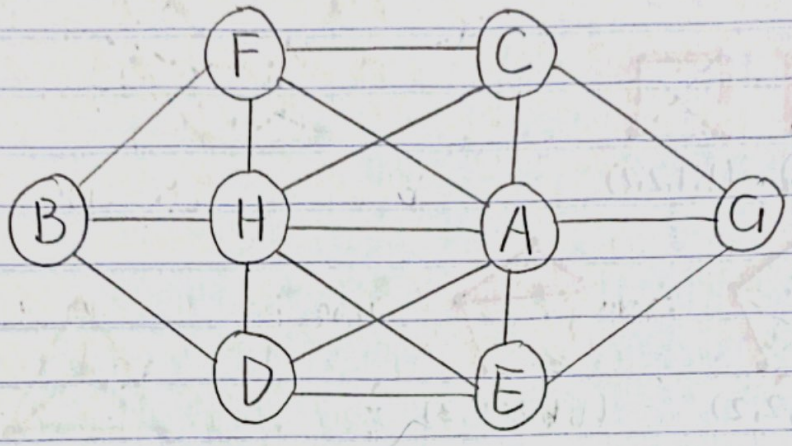
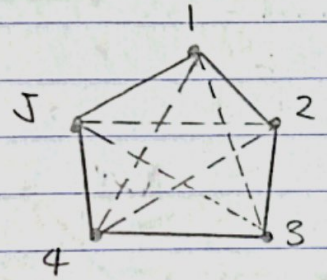
HW4:

Section4: Q4.1 / 4.2 / 4.3 / 4.4

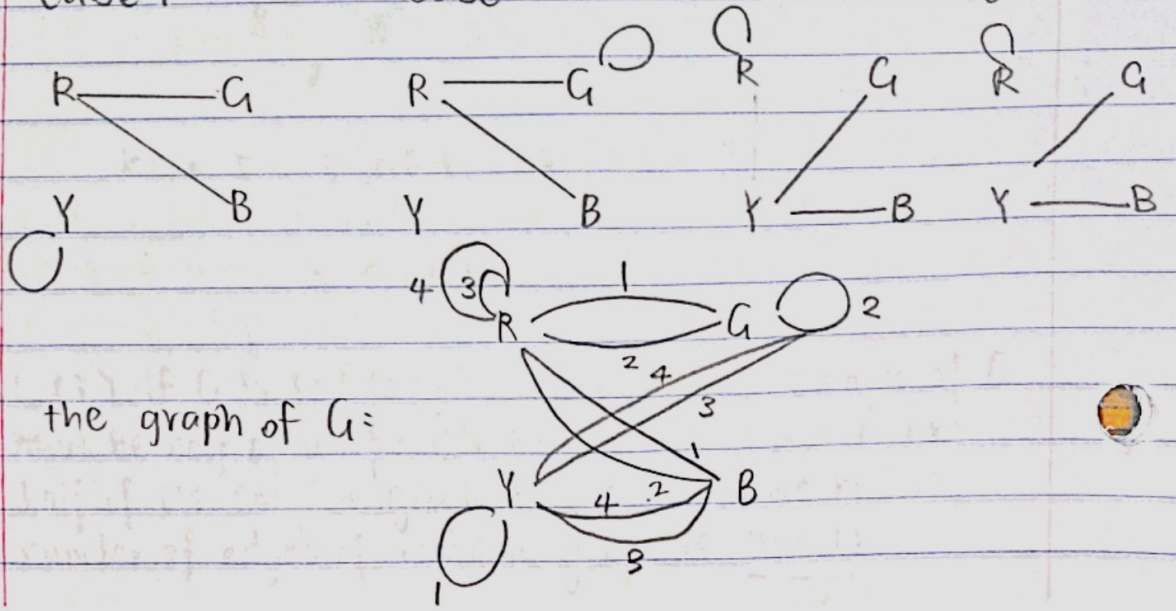
Q4.1: another solution of eight circle prob:



Q4.2: gathering of 5 peoples, no 3 people who all know each other, and no 3 people none of whom knows either of the other 2.

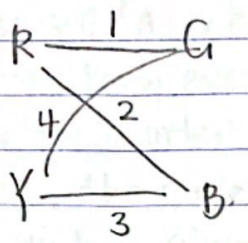


Q4.3: cube 1: cube 2: cube 3: cube 4:

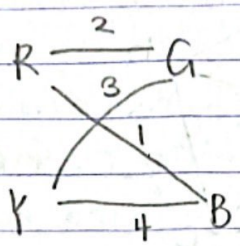


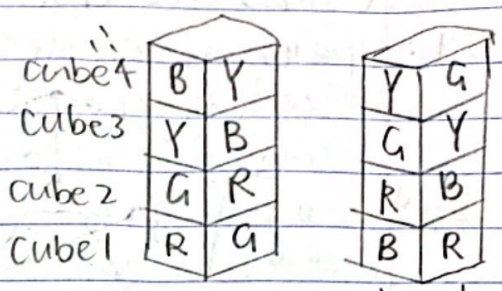
so by the graph of G_1, we find two subgraphs H_1, H_2.

H_1
front & back

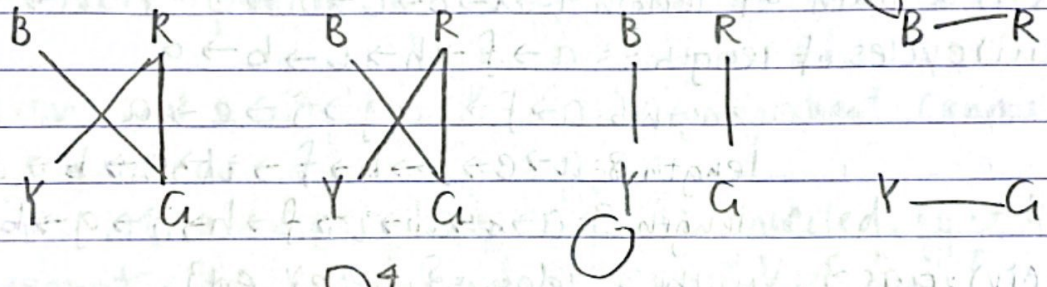


H_2
left & right

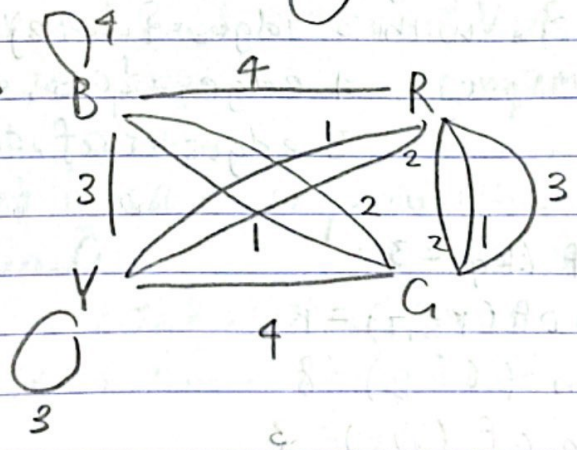




Q4.4: cube 1: cube 2: cube 3: cube 4:



the graph of G is



Because there is no relation between four cubes, so no solution exist.
cube 1 and cube 2 is totally same.