- [ ] Question #1

g(a) = (1,2), g(b) = (1,3), g(c) = (2,3), g(d) = (2,2)

- [ ] Question #2

2a. yes

2b. yes

2c. no

2d. 3, 4, 5, 6 and 3, 5, 6

2e. 3, 4, 5, 3

2f. a5

2g. a6

- [ ] Question #5

- [ ] Question #9

9a. this implies that nobody from either department is acquainted with anyone in the other department.

9b. Carl and Fletcher are not acquainted, SiuYin is only acquainted with Carl

9c. 2

- [ ] Question #13

B is not isomorphic to the other graphs because all three nodes are connected, whereas the other two graphs have a disconnected node.

- [ ] Question #30

8 regions

- [ ] Question #49

n disconnected nodes each node connected to itself with a loop

- [ ] Question #50

n disconnected nodes, each with a degree of 0

- [ ] Question #51

The n x n matrix with 0s down the middle diagonal and 1s everywhere else

- [ ] Question #65

- [ ] Question #71

The matrix for G’ will have all its 1s changed to 0s and all its 0s changed to 1s except for the elements in the diagonals, those will remain the same.