

CSC236 Assignment 1

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Question 1

- a. Yes. We can prove $P(235)$ follows from $P(234)$.

Rough Work:

Assume $P(234)$. That is, every bipartite graph on 234 vertices has no more than $\frac{234^2}{4}$ edges.

We need to prove $P(235)$ follows. That is, every bipartite graph on 235 vertices has no more than $\frac{235^2}{4}$ edges.

1. Find the configuration where bipartite graph on 235 vertices form most number of edges in terms of bipartite graph on 234 vertices.
2. Show that $\frac{235^2}{4}$ is the most number of edges bipartite graph on 235 vertices could form.

Question 2

Question 3

Question 4