Lecturer: Isabel Müller AUC Cairo
Deadline: 19.05.2024 Spring Term 2024
TA: Dina Saleh Handin: Gradescope

Graph Theory Bonus Homework Series 12 In Groups of 2-4 Students

Keywords: Classical Ramsey Numbers, Graph Ramsey Numbers.

Exercise 1. Prove that $R(3,5) \leq 14$.

Hint: Follow the ideas of the proof that R(3,4) = 9 and also use that fact.

4 points.

Exercise 2. Find $R(P_4, P_4)$ and prove your answer. Here, P_4 is the path on 4 vertices of length 3.

4 points.