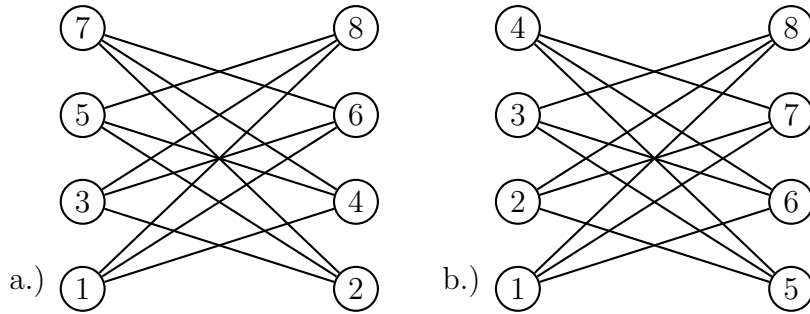


Weekly Problems 9

Due: 22 Mar 2023 at midnight EST as a PDF on Submittity

v1.0: Last Updated March 19, 2024

- Using the greedy coloring algorithm, how many colors will result on the graph G below with the two given vertex orderings? Also, show the outputs for your greedy coloring.



- Tightly bound the possible chromatic numbers of the above G , $\chi(G)$. Give both a tight upper and tight lower bound, if possible. Justify your response using the bounds discussed in class.