

Weekly Problems 8

Due: 26 March 2026 at midnight EST as a PDF on Submittity

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1. In class we proved that every G where $\chi(G) \geq k$ has a K_k subdivision when $k = 4$. Prove this for $k = 2$ and $k = 3$ as well. (2 pts)
2. Prove that in k -critical graph G the minimum degree must satisfy $\delta(G) \geq (k - 1)$. (2 pts)