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Hand-in-problems for Convex Polytopes VT13
Second set of problems

Cooperation regarding the hand-in-problems is not permitted.
You must have written your solution on your own. Any external source used must be cited.

List of Hand-in problems

6) Exercise 3.4 (i) and (ii) in "Lectures on Polytopes".

7) Exercise 3.6 in "Lectures on Polytopes". Results about higher dimensions than 3 is a bonus but not a requirement.

8)
a) Show that the complete graph K_5 is ΔY-reducible to an edge.
b) Show that the complete bipartite graphs $K_{3,n}$ are ΔY-reducible to an edge.
c) Show that $K_{4,4}$ **minus one edge** is ΔY-equivalent to K_6. Find 5 other non-isomorphic simple graphs ΔY-equivalent to both of them. Deduce that $K_{4,4}$ **minus one edge** and K_6 are not ΔY- reducible to an edge.

9) Exercise 4.8 in "Lectures on Polytopes".

Problems 6-9 are **due 22/3**

Good Luck!!

Svante