

Alekses Mureuskes 260718388

Q2, Alg 1

Find smallest # of V in G
to remove all triangles

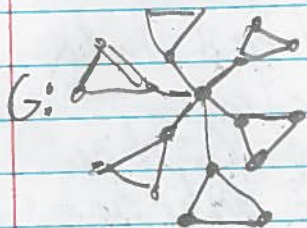
While Δ exists in G

• Delete all V in Δ

output deleted V

Proving 3 factor

The given G proves Alg 1
is 3 factor.



Let G have n Triangles

if all Triangle share no vertices

Then the $3n$ vertices will
be removed from G

Since only one vertex needs
to be removed from each triangle, n vertices
removed in Optimal, therefore this is 3-factor Opt
 $3n$ vs. n