

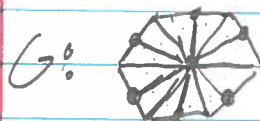
Aleksas Mureuskas 260718389  
Q2, Alg 2

II while  $\Delta$  in  $G$

· Delete an arbitrary  $v \in \Delta$  in  $G$

Output deleted  $v$

Counter example :



12 Triangles

The optimal soln is 1, remove the central vertex and all  $\Delta$ 's disappear. If the arbitrary vertex chosen is any vertex other than the center, it will destroy 2  $\Delta$ 's. Therefore to destroy all  $\Delta$ 's in  $G$ , Alg II has to loop 6 times, resulting in an output of 6 vertices.

6 vs. 1

Alg II is not 3 factor approx.