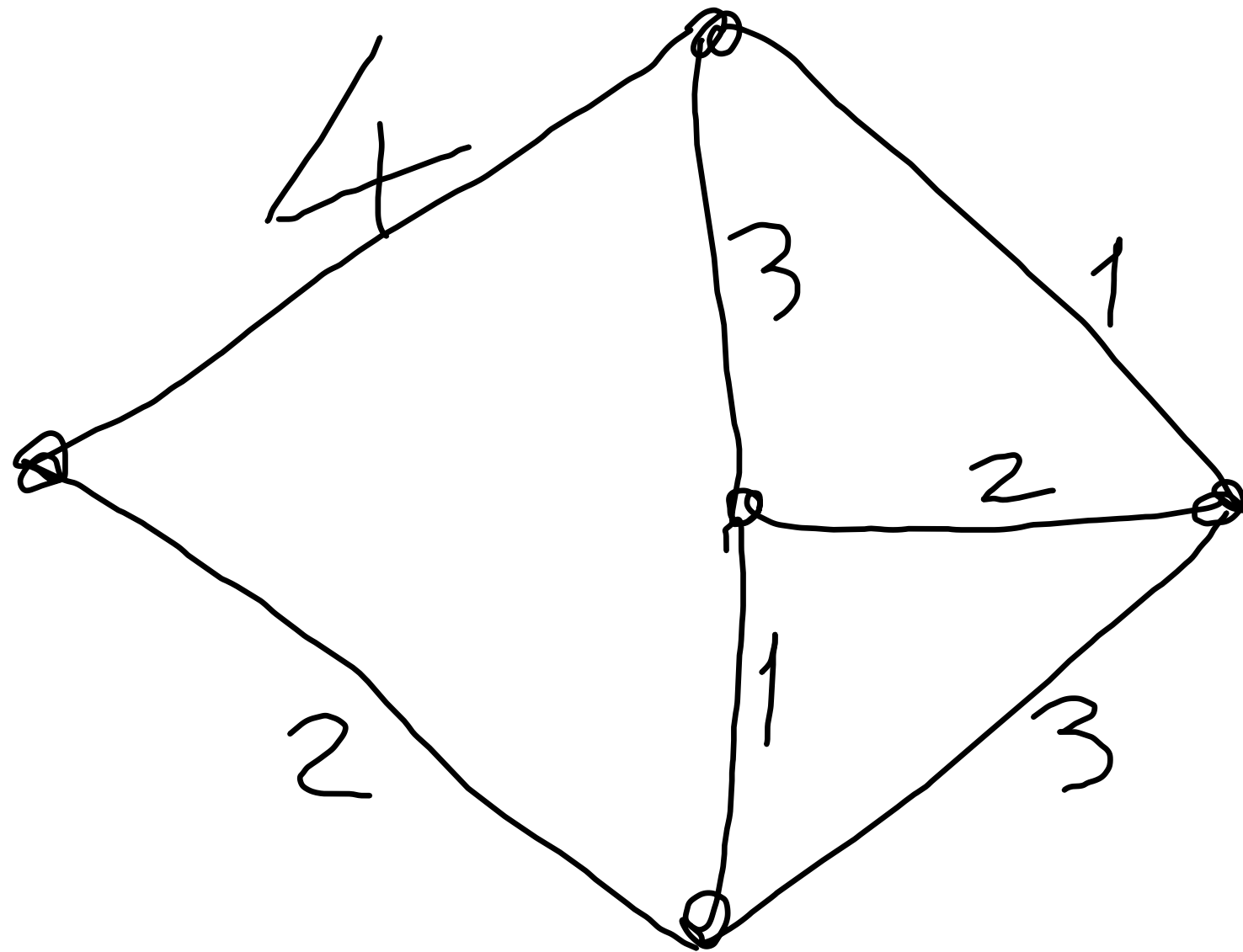
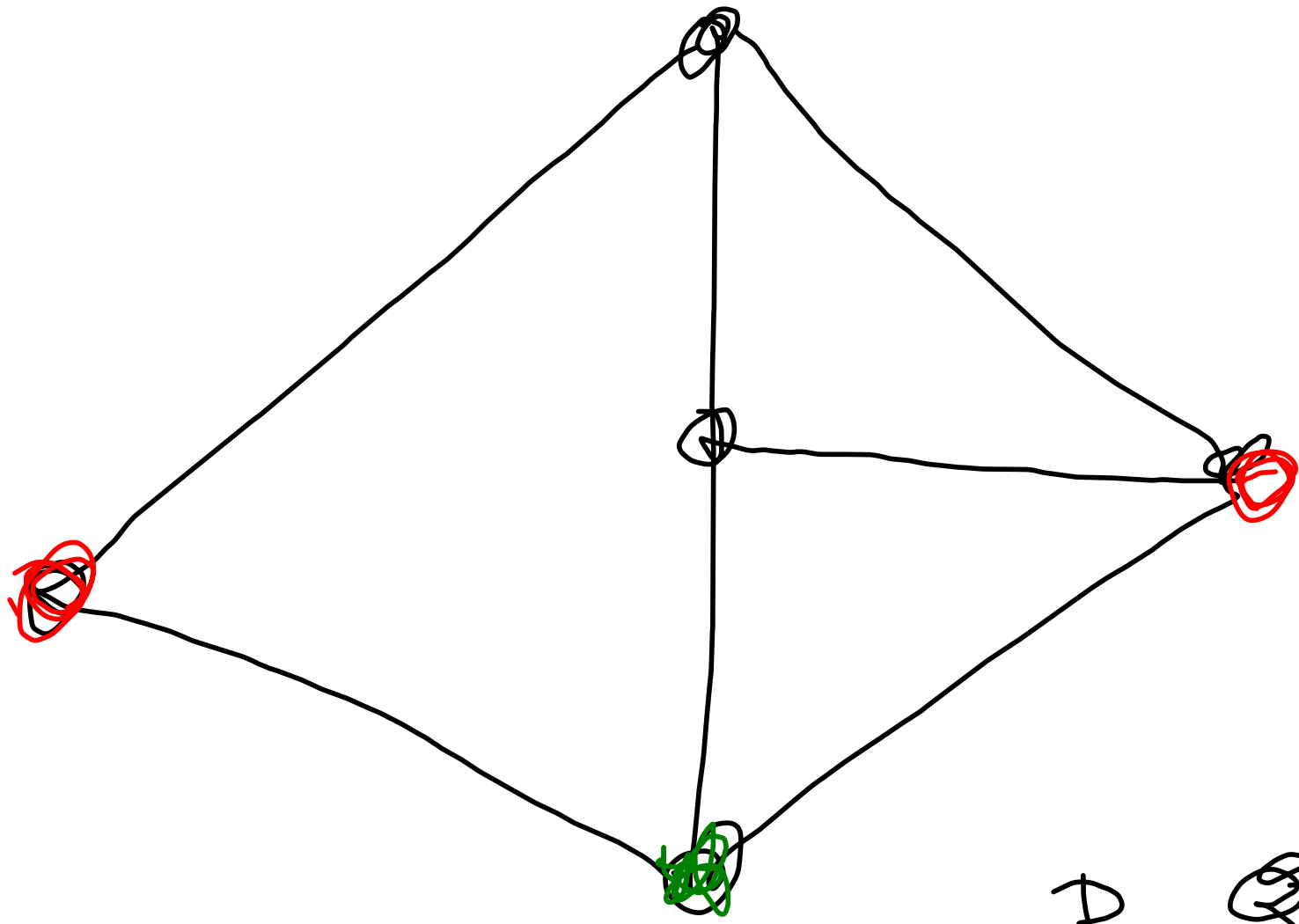


Clique K Ramsey's thm Indip. set complementary Covering
 $\alpha + \beta = v$
 Clique of G
 = ind. set of
 the complementary
 graph G^c

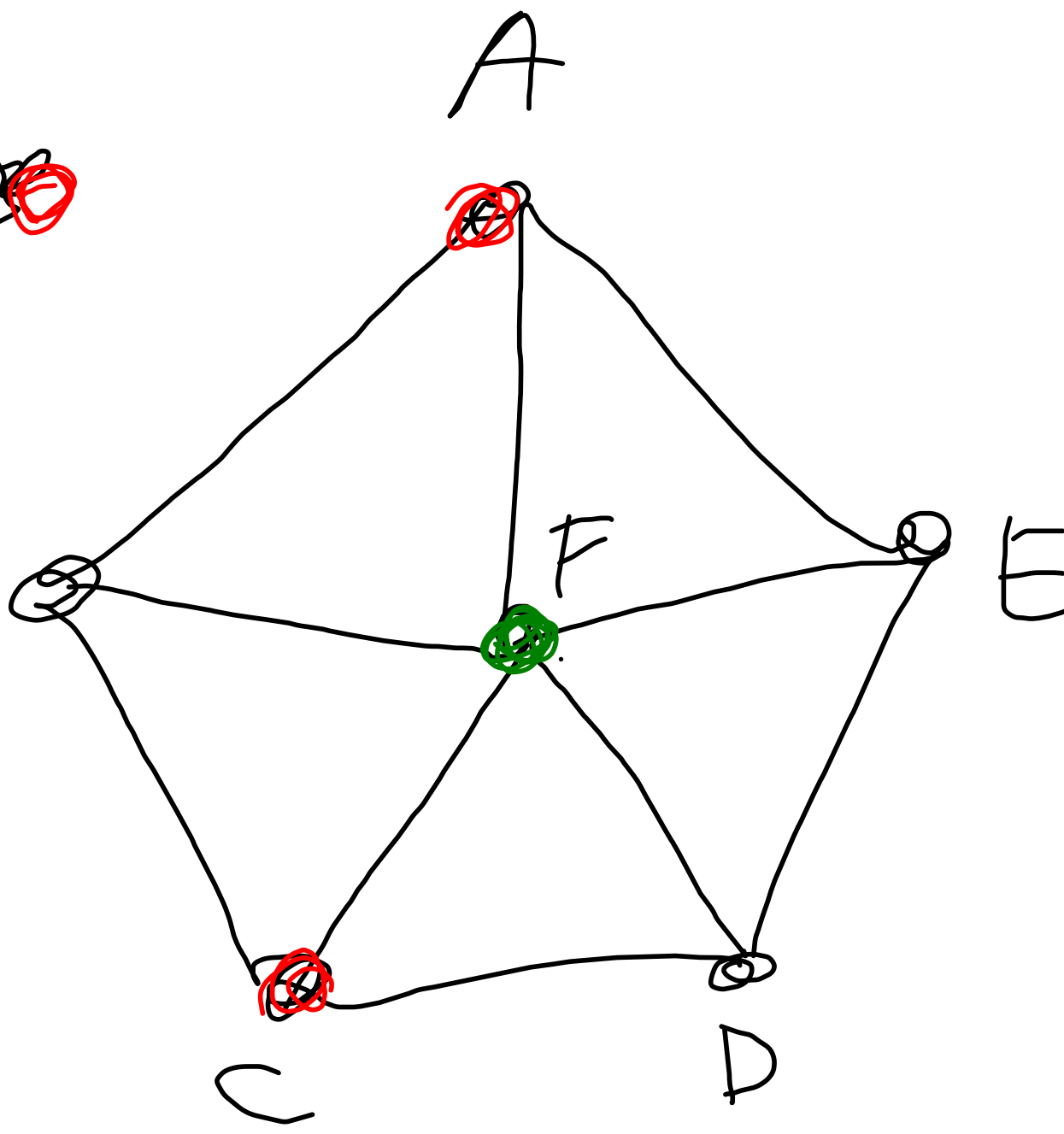
Matching Edge covering
 $\alpha' + \beta' = v$

bip. / max ind. / = / min edge cov.
 $|M| \leq |K|$
 bip. / max M / = / min K





B



$$\gamma - \beta \leq \alpha$$

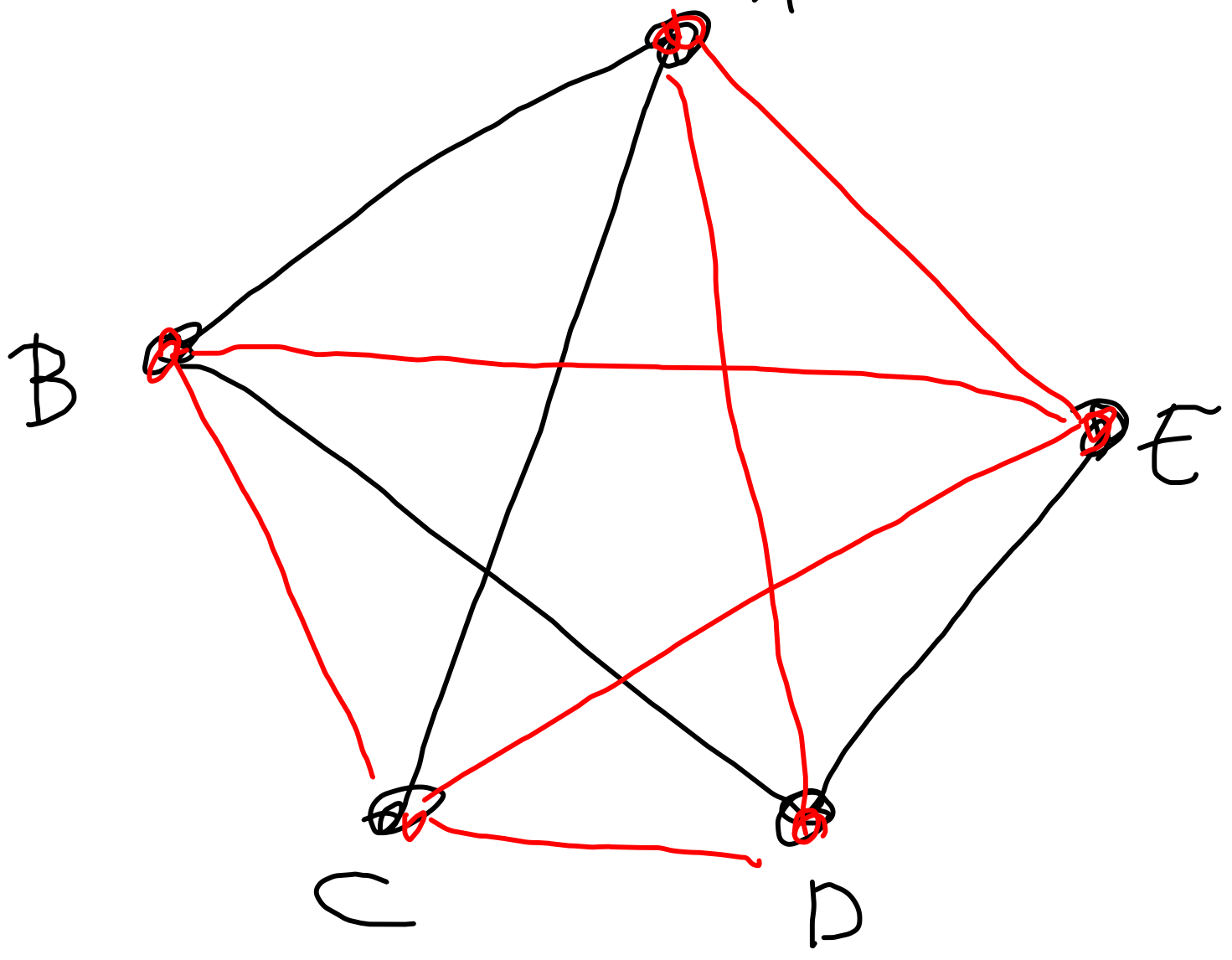
$$\gamma - \alpha \leq \beta$$

$$\Leftrightarrow \gamma \leq \alpha + \beta$$

$$\Leftrightarrow \gamma \geq \alpha + \beta$$

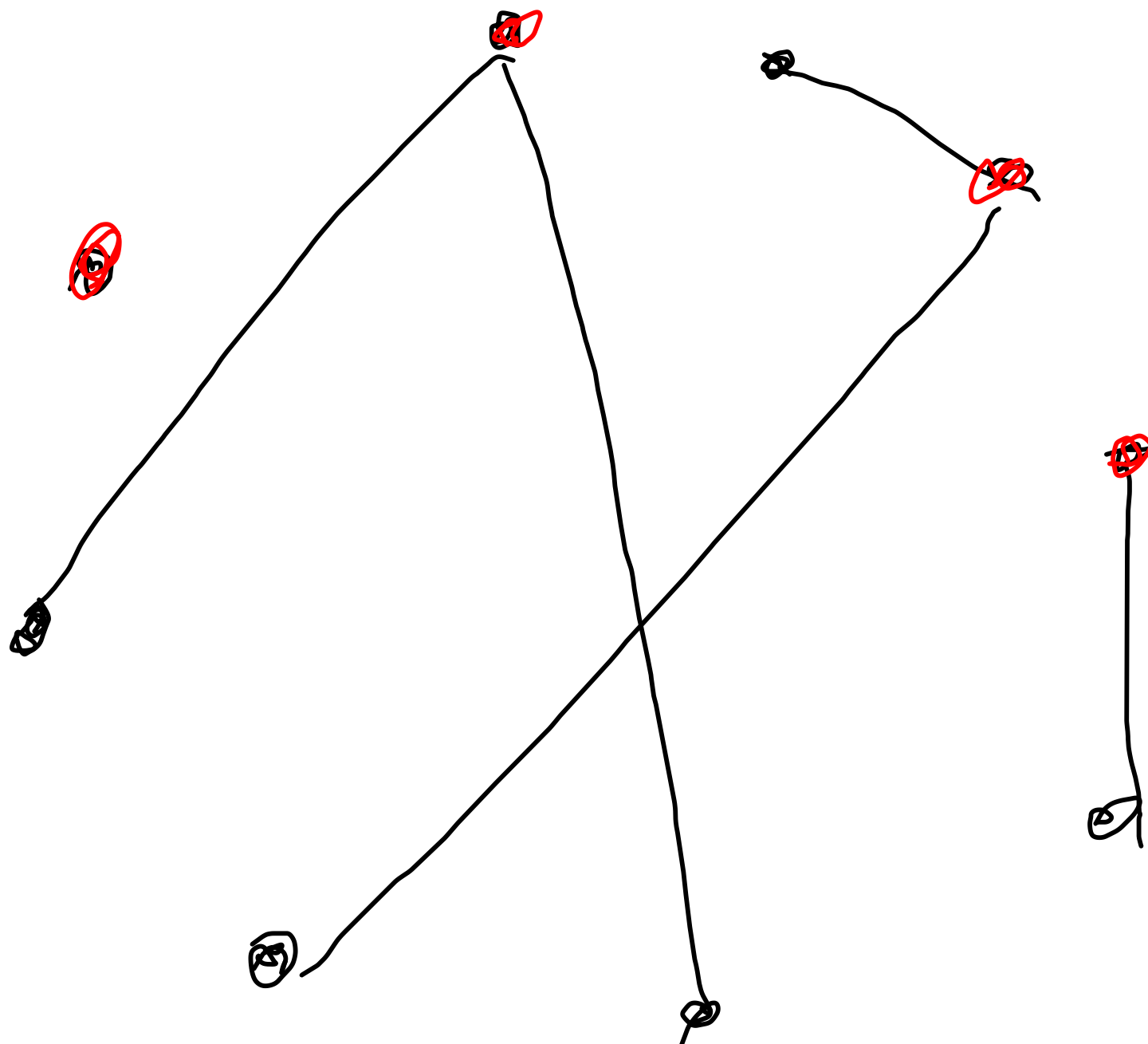
$$\Leftrightarrow \gamma = \alpha + \beta$$

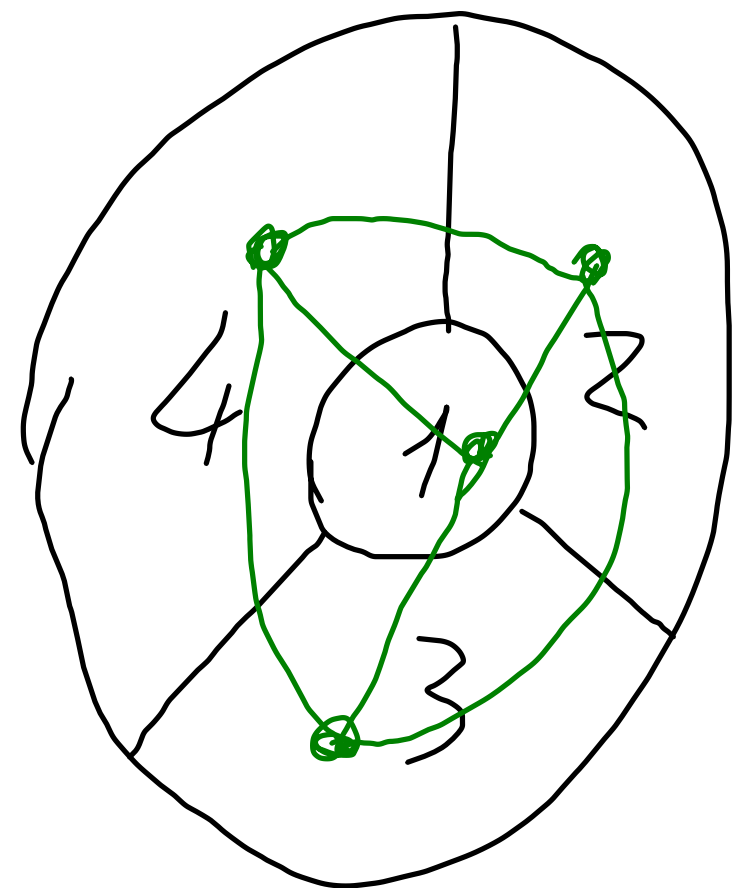
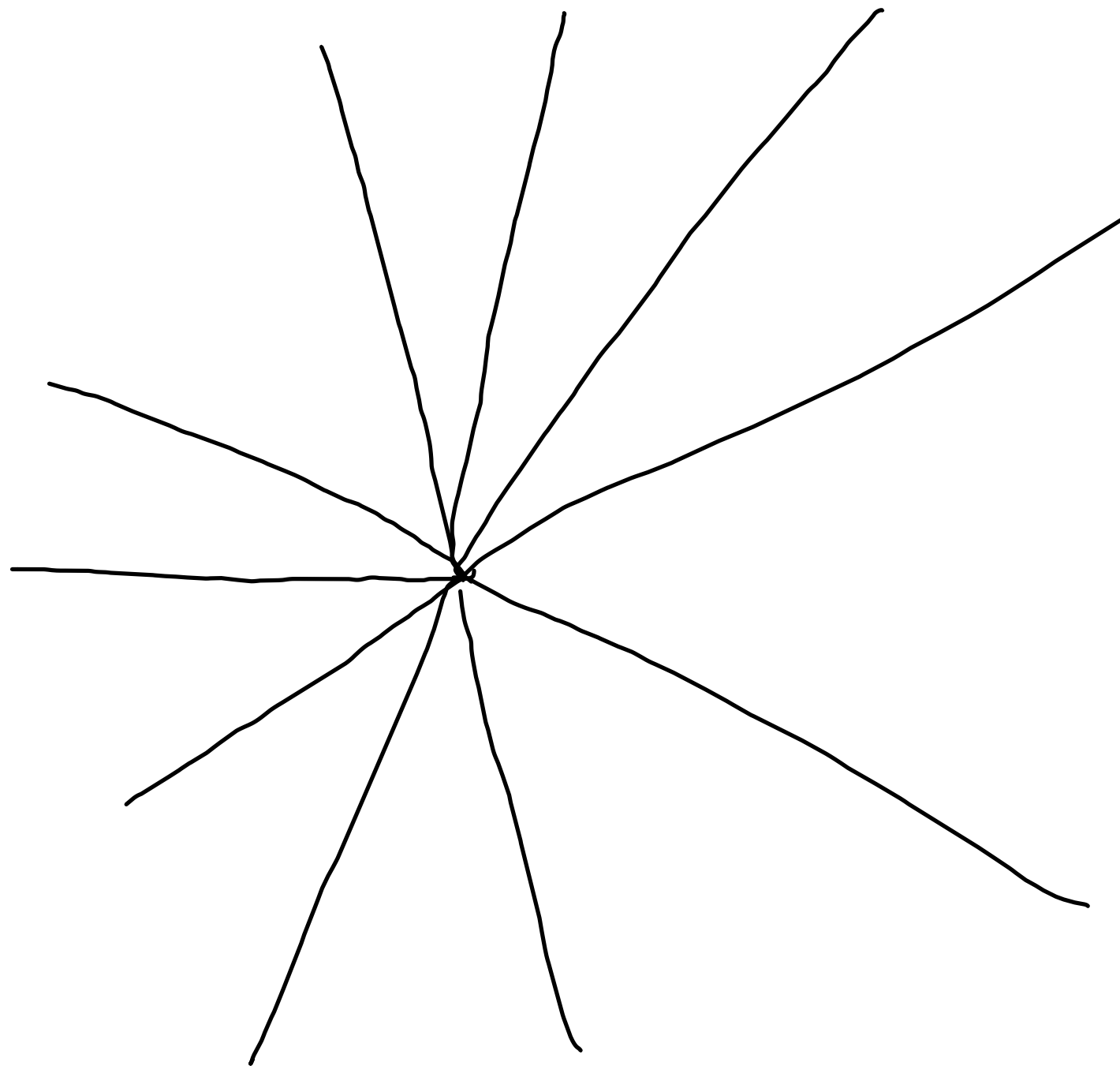
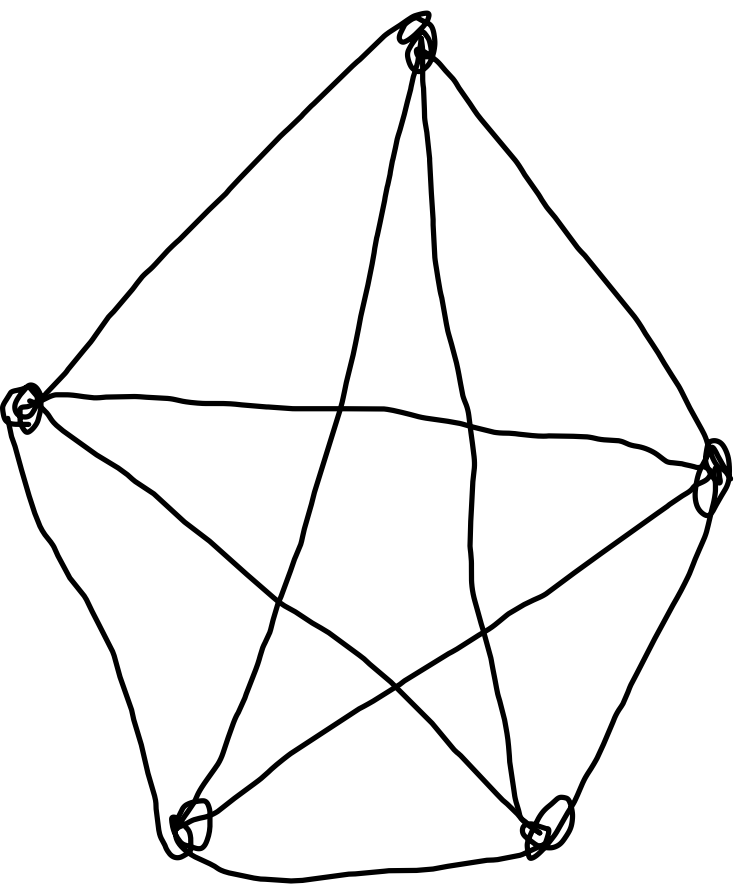
G



G'

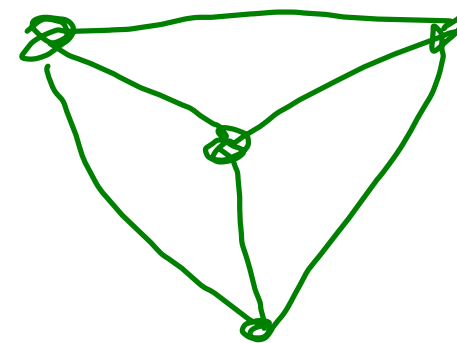
$$g = \mathcal{L}(3, 4)$$

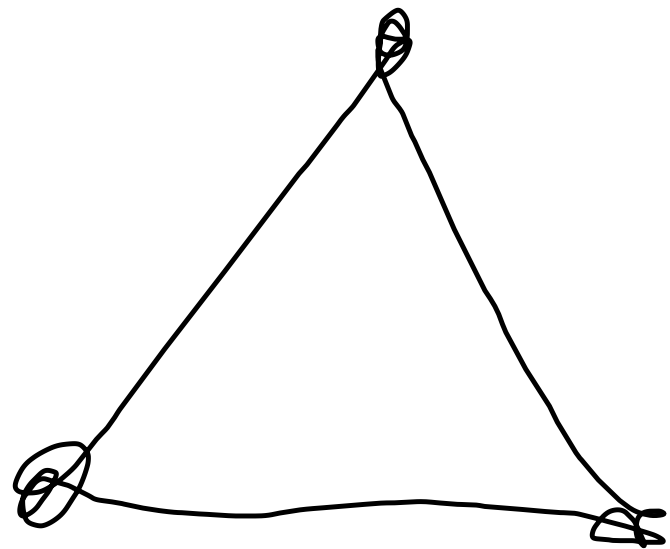




$$\Delta \geq \chi - 1$$

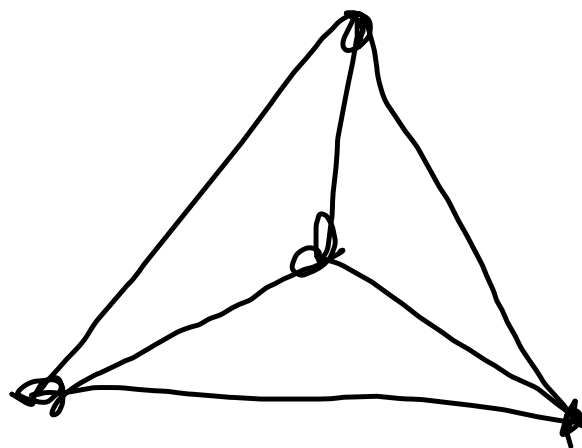
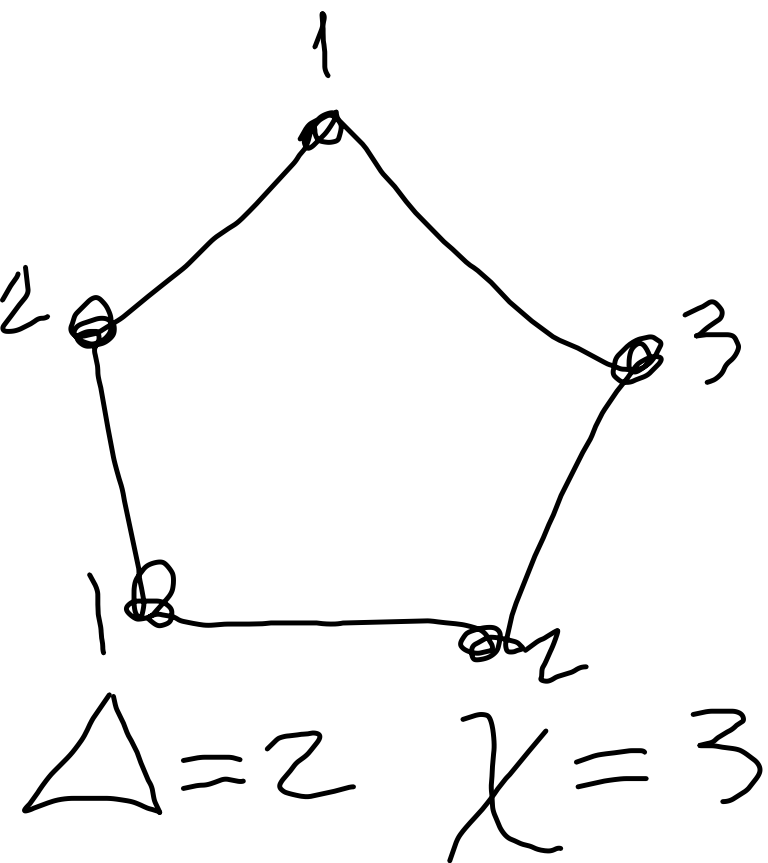
$$\chi \leq \Delta + 1$$





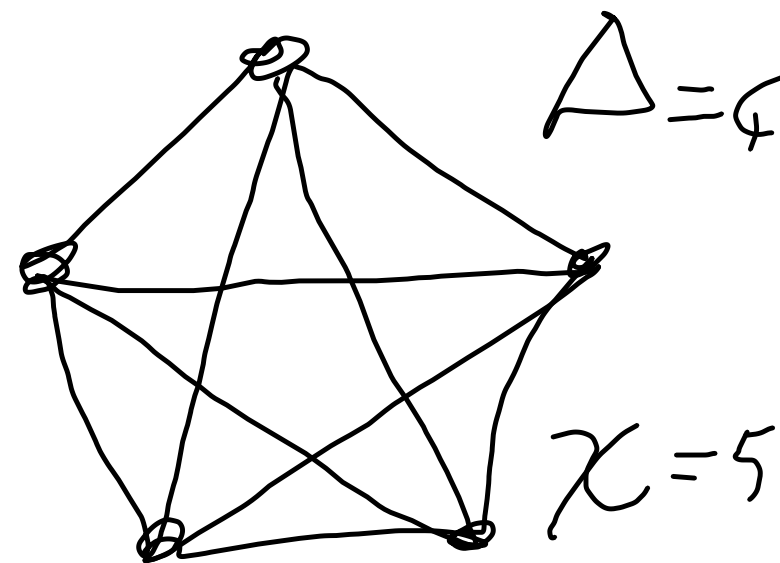
$$2 = \Delta$$

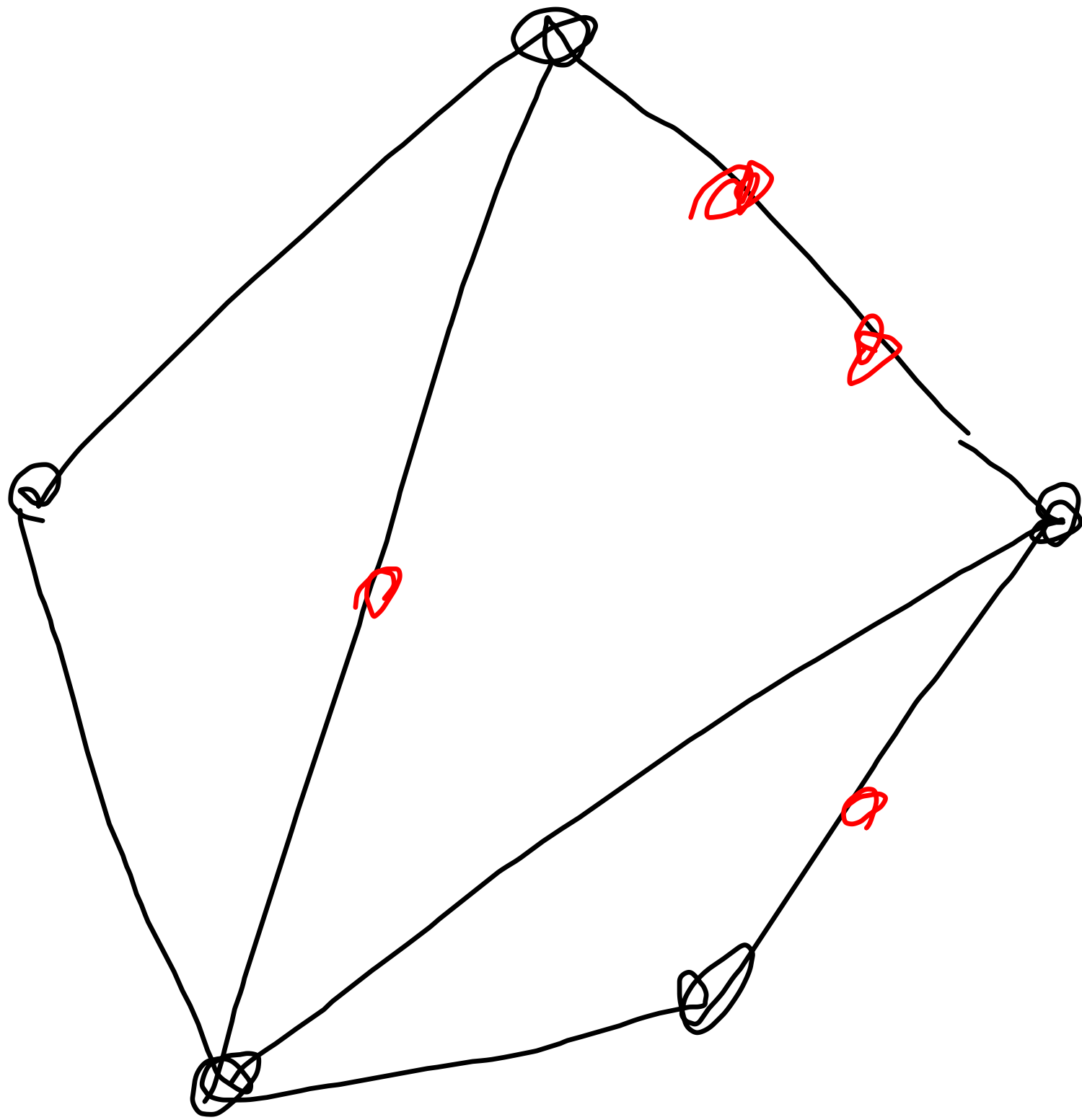
$$\chi = 3 = \Delta + 1$$



$$\Delta = 3$$

$$\chi = 4$$





G

