

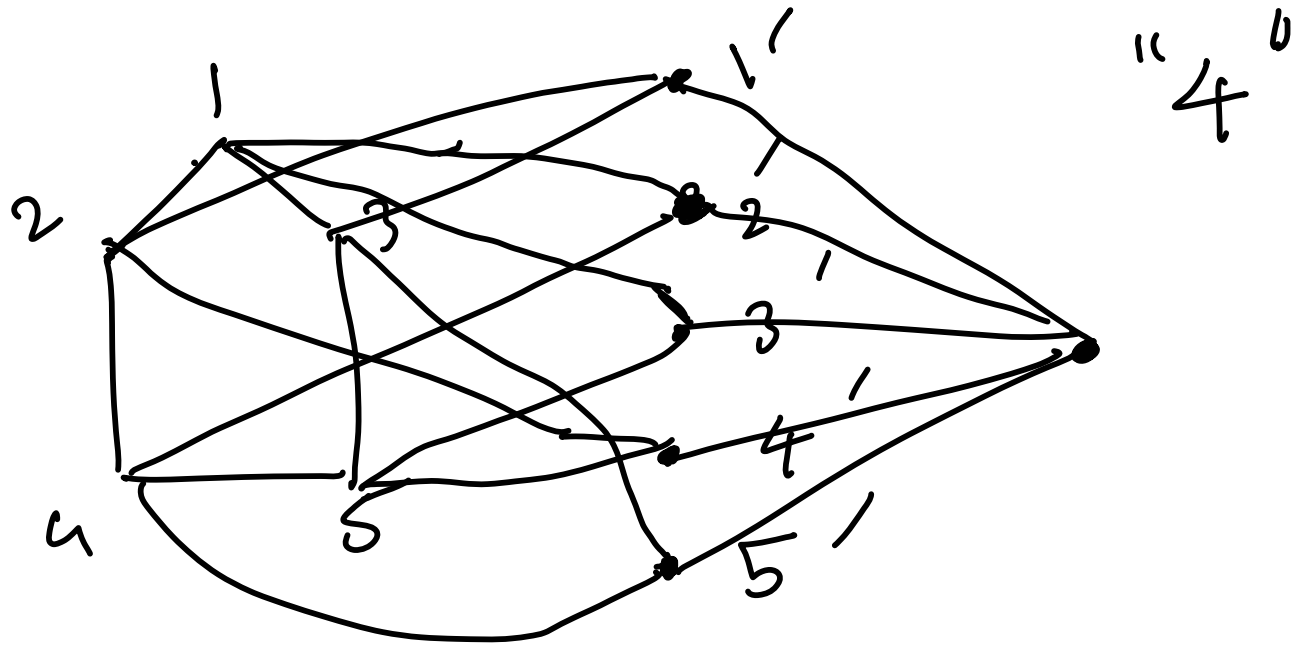
K_2

$$\chi(G) = 3$$

3 colors

$$\chi(G) = 4 \text{ and}$$

triangle free.



$\chi(G) = k$ and triangle free

G' such that $\chi(G') = k+1$ and
 G' is triangle-free?

k colour

G'

$\chi(G) = k+1$

$\chi(G)$



,



$k+1$

