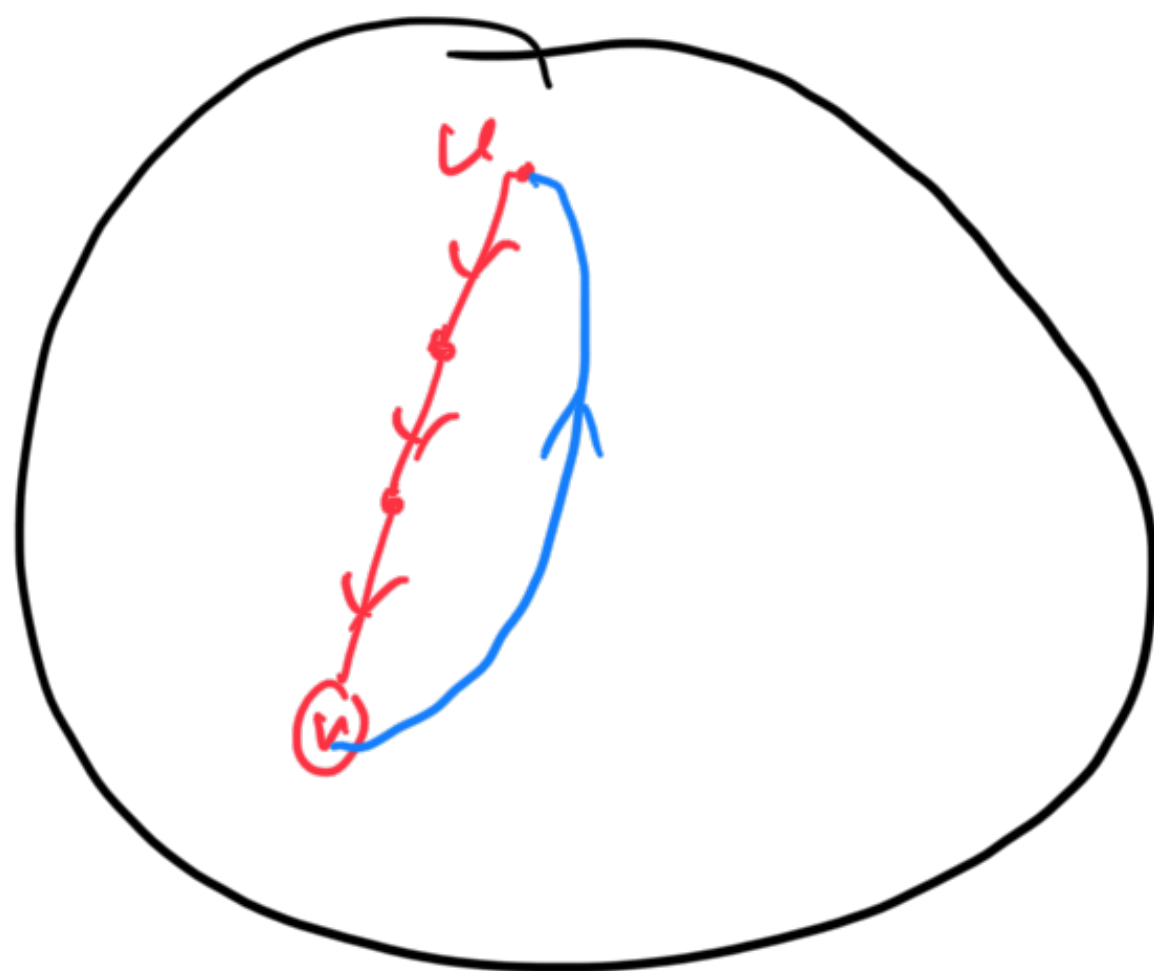
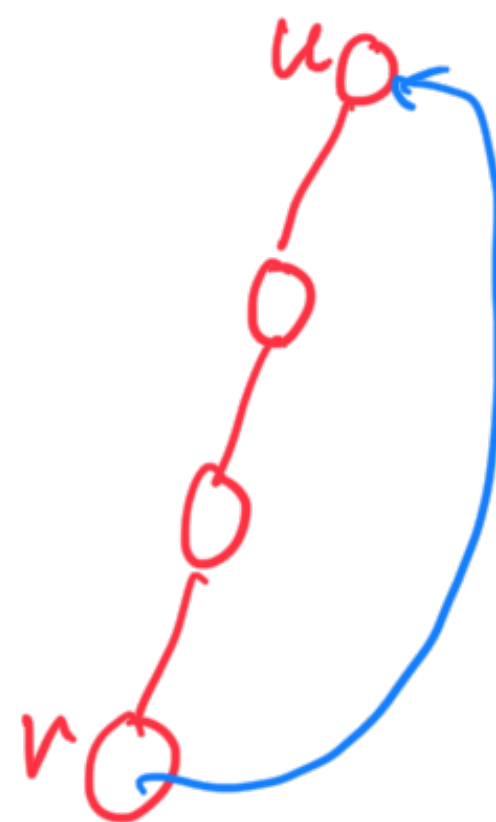


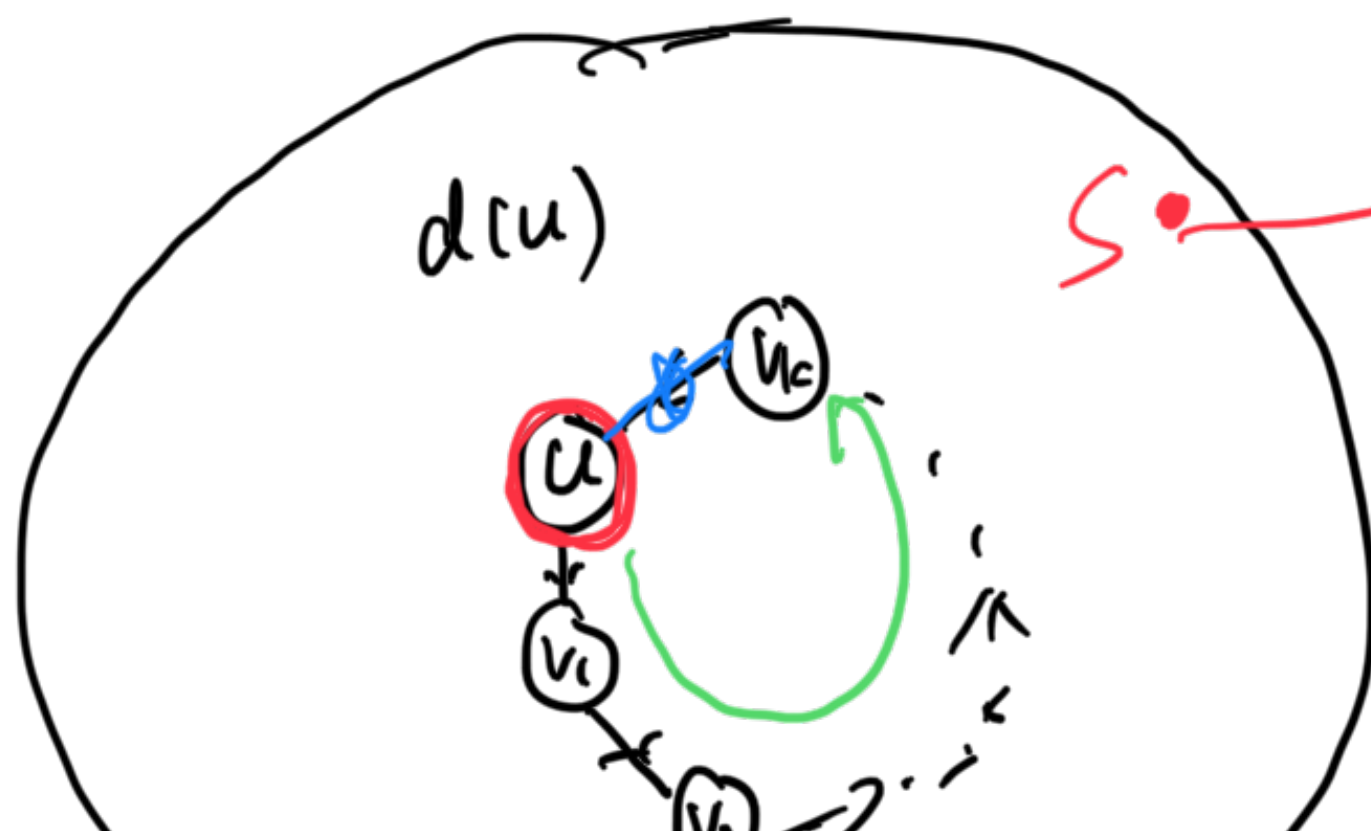
G



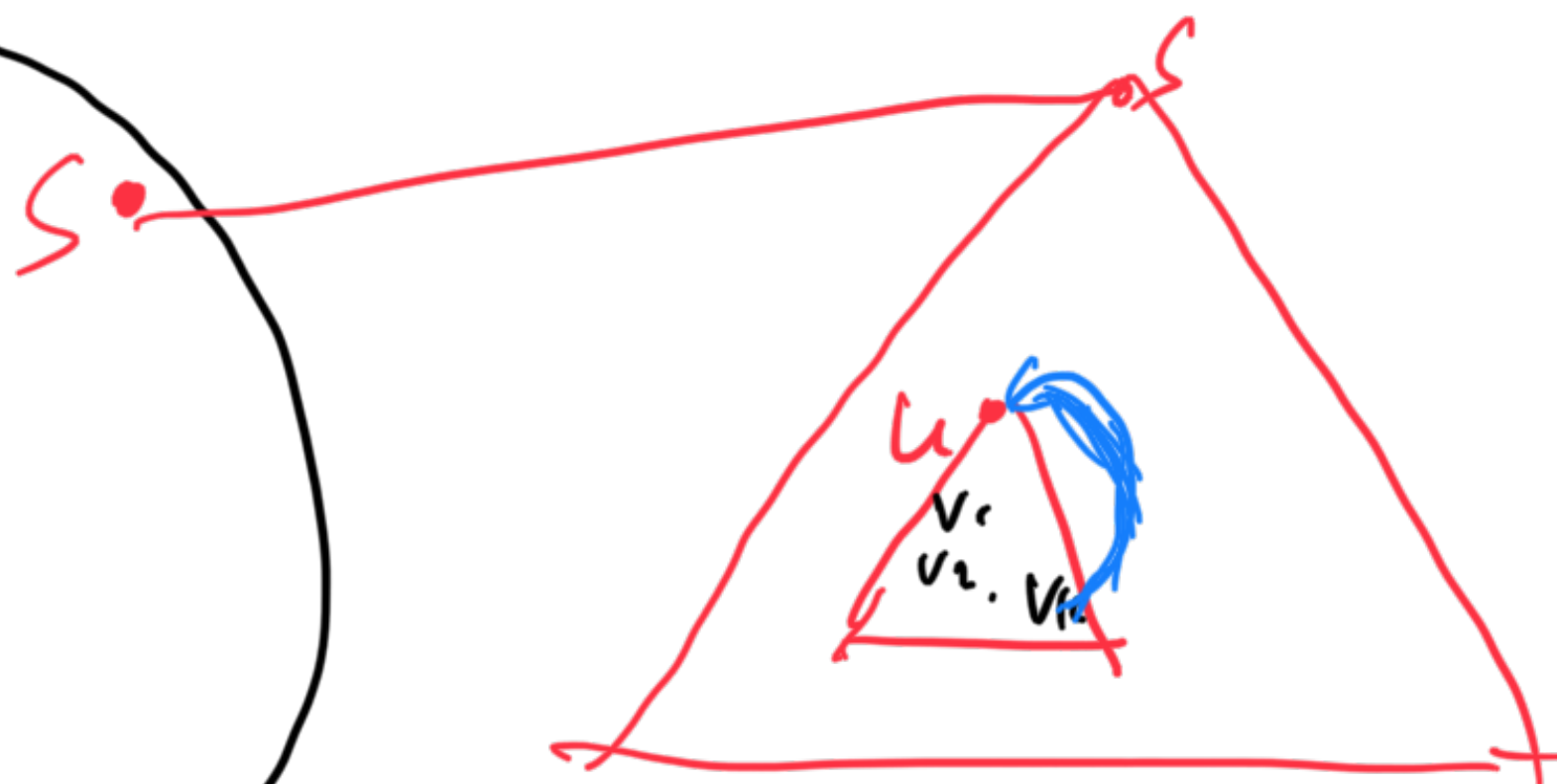
DFS Tree

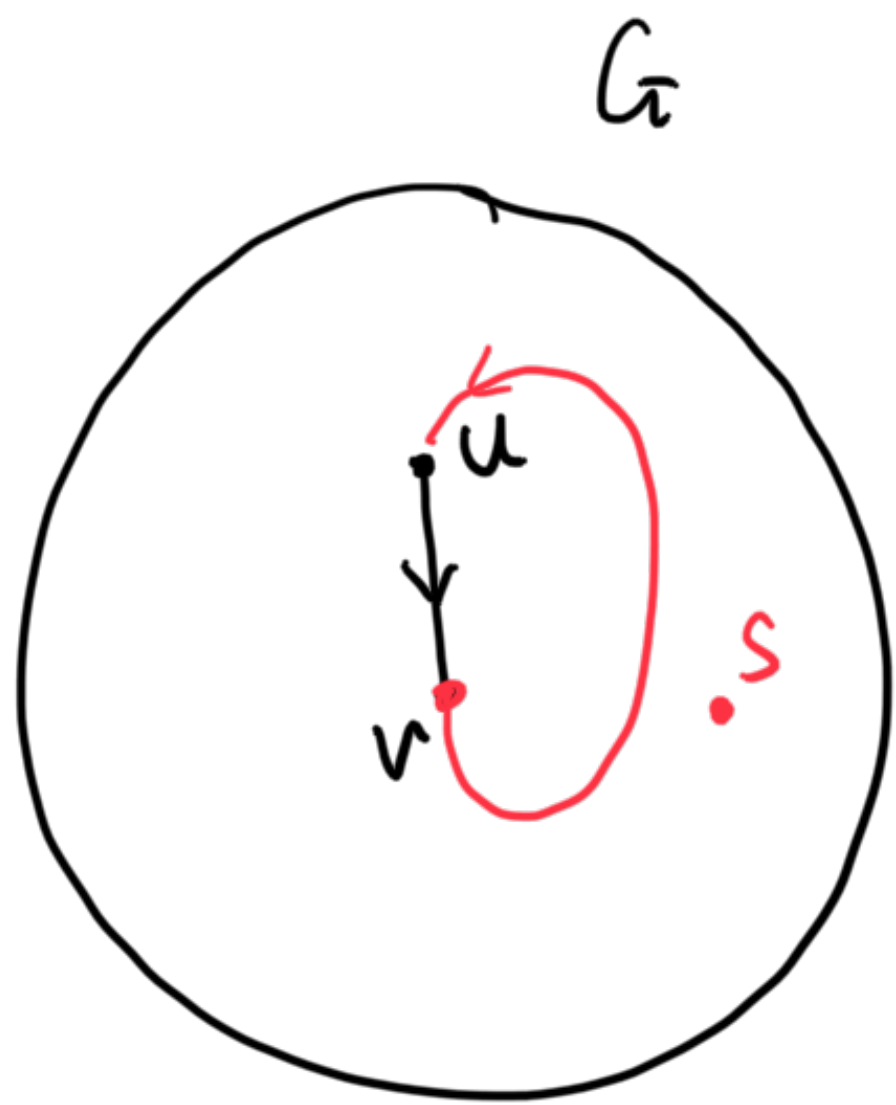


G



DFS



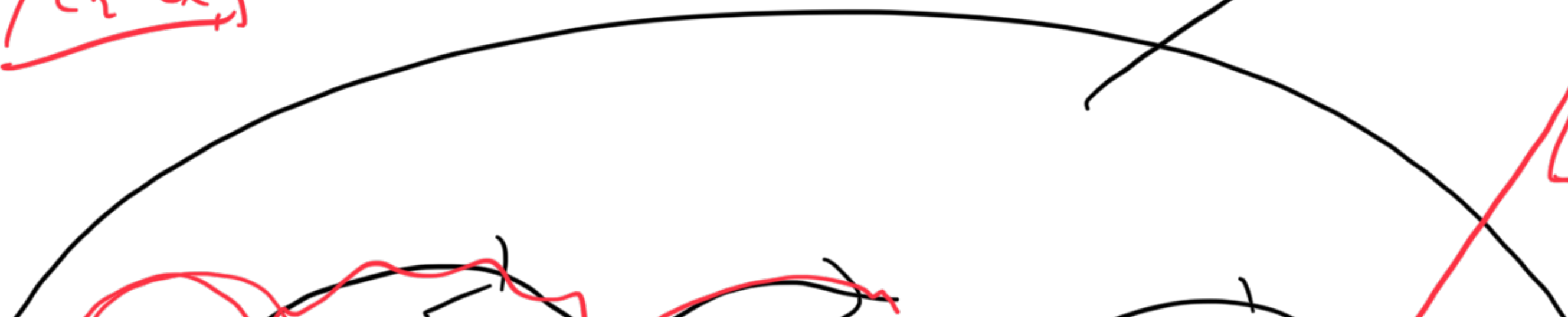


$d(u)$ color of v ?

$f(u) > f(v)$?

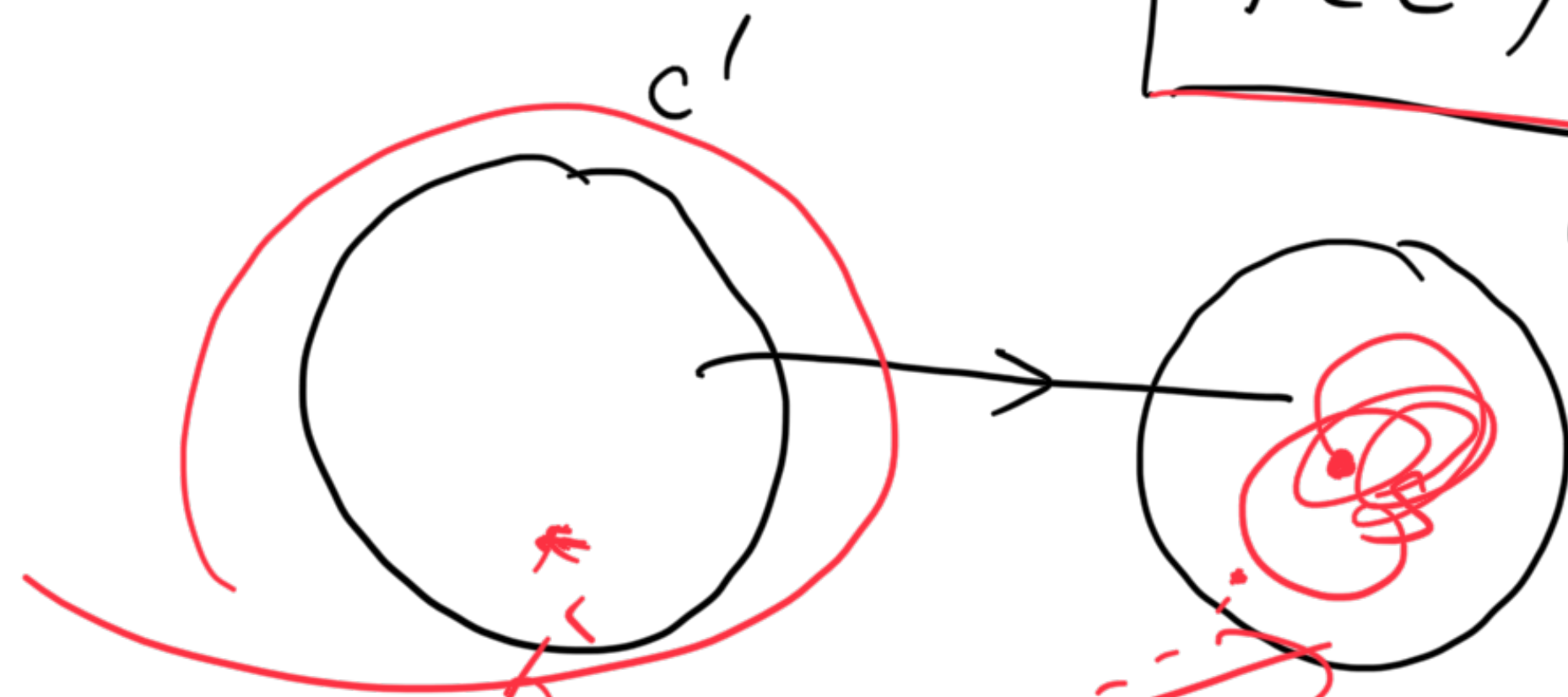


G





$$f(c') > f(c)$$



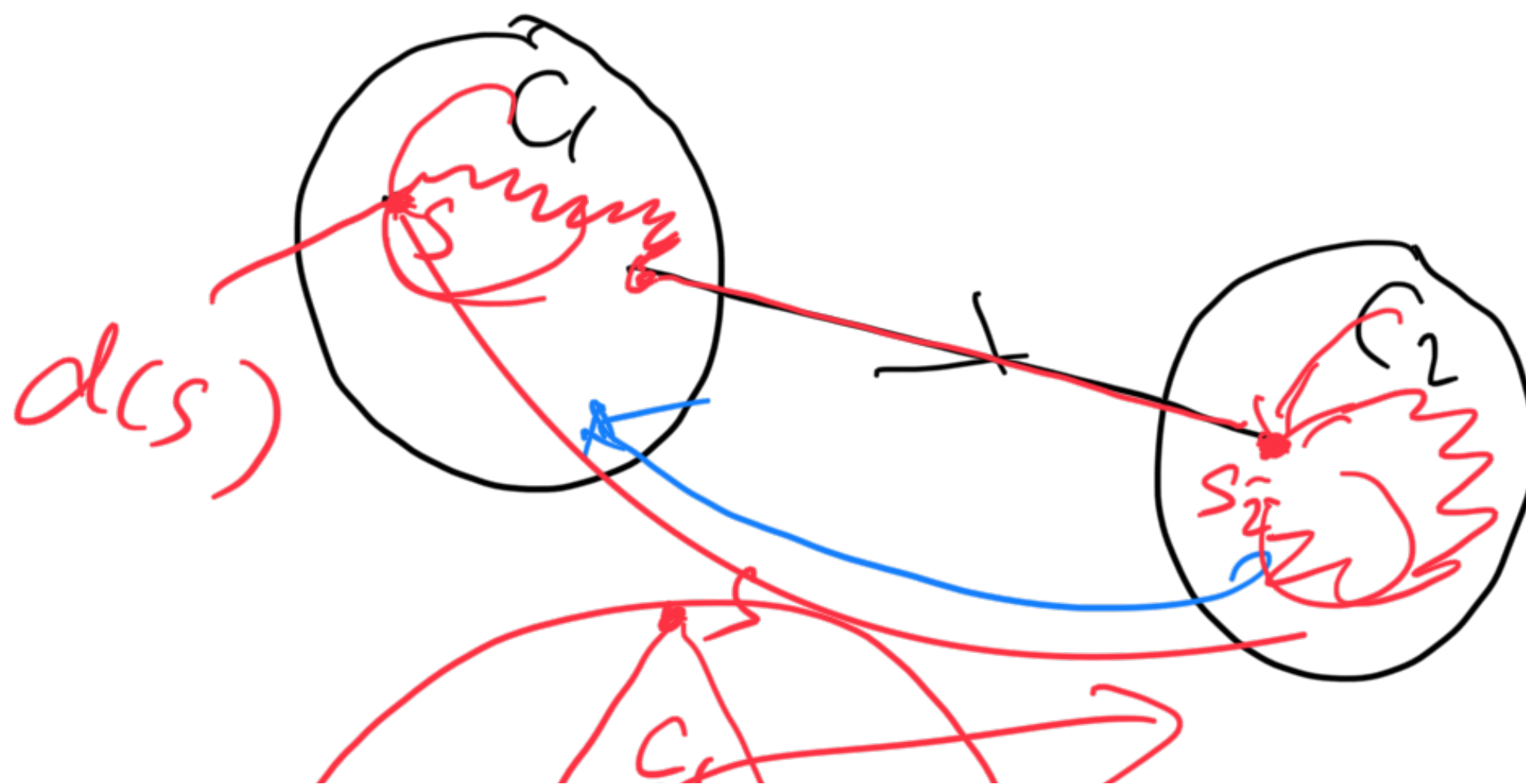
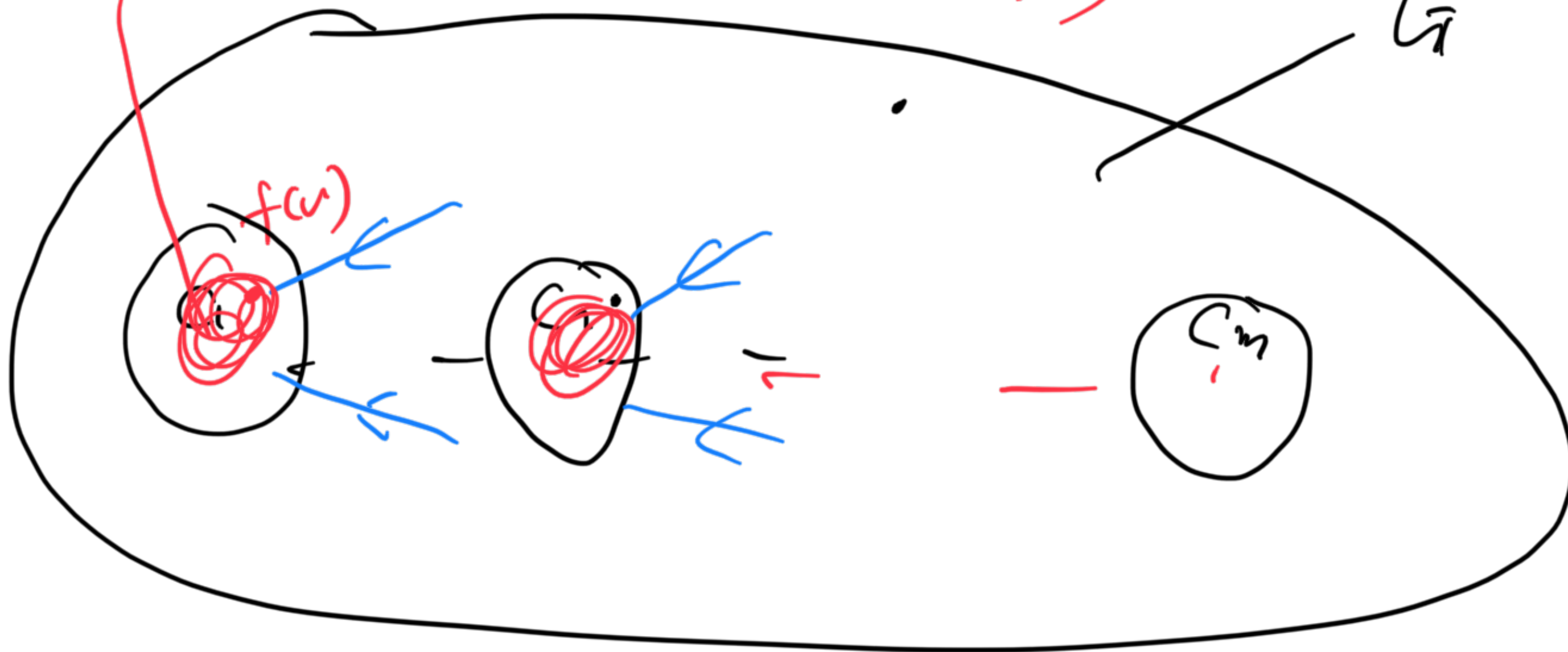
$$f(c) = f(s)$$

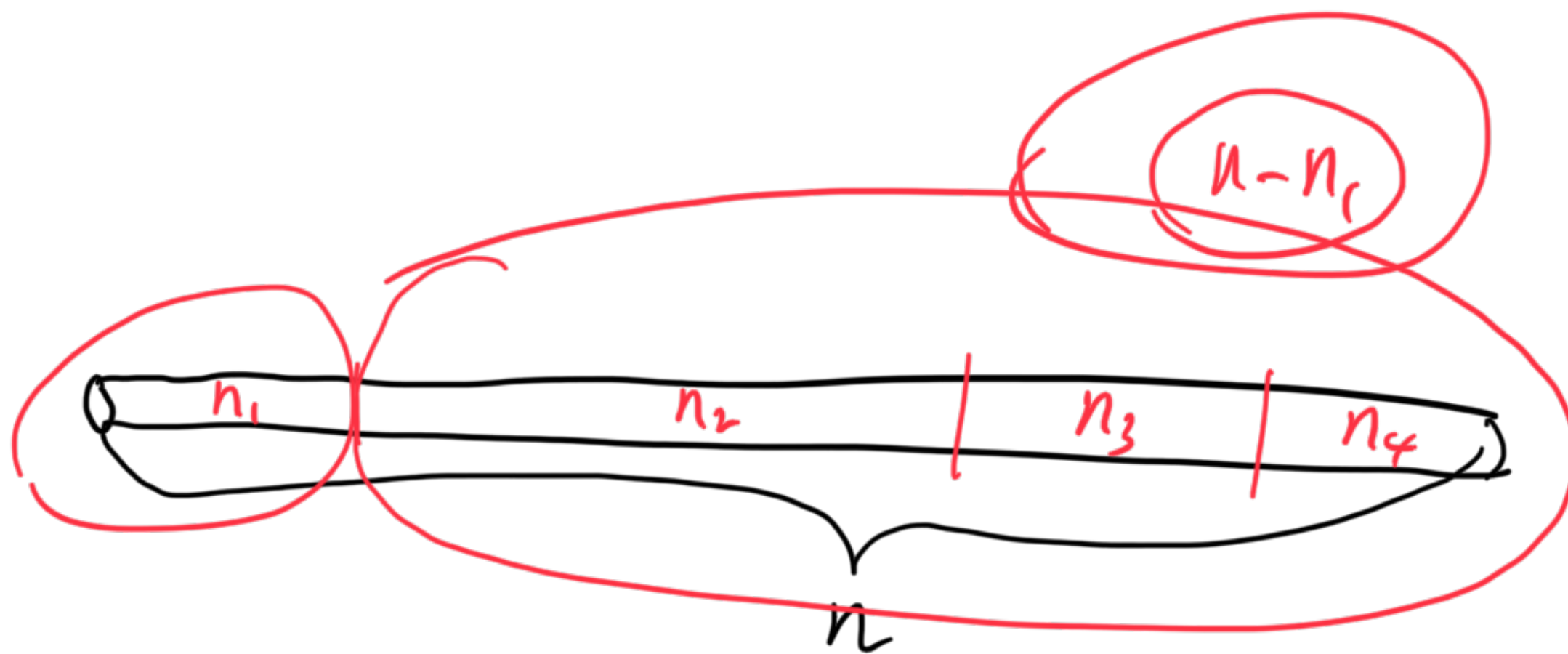
$$f(c) < f(s) = f(c')$$

$$C_1, C_2, \dots, C_m \rightarrow f(c') > f(c)$$

DES

G





$\langle n_1, n_2, n_3, n_4 \rangle$

$n_1 +$

$\langle n_2, n_3, n_4 \rangle$

$\rightarrow n - n_1$

$n_1 + \langle n_2', n_3', n_4' \rangle$

