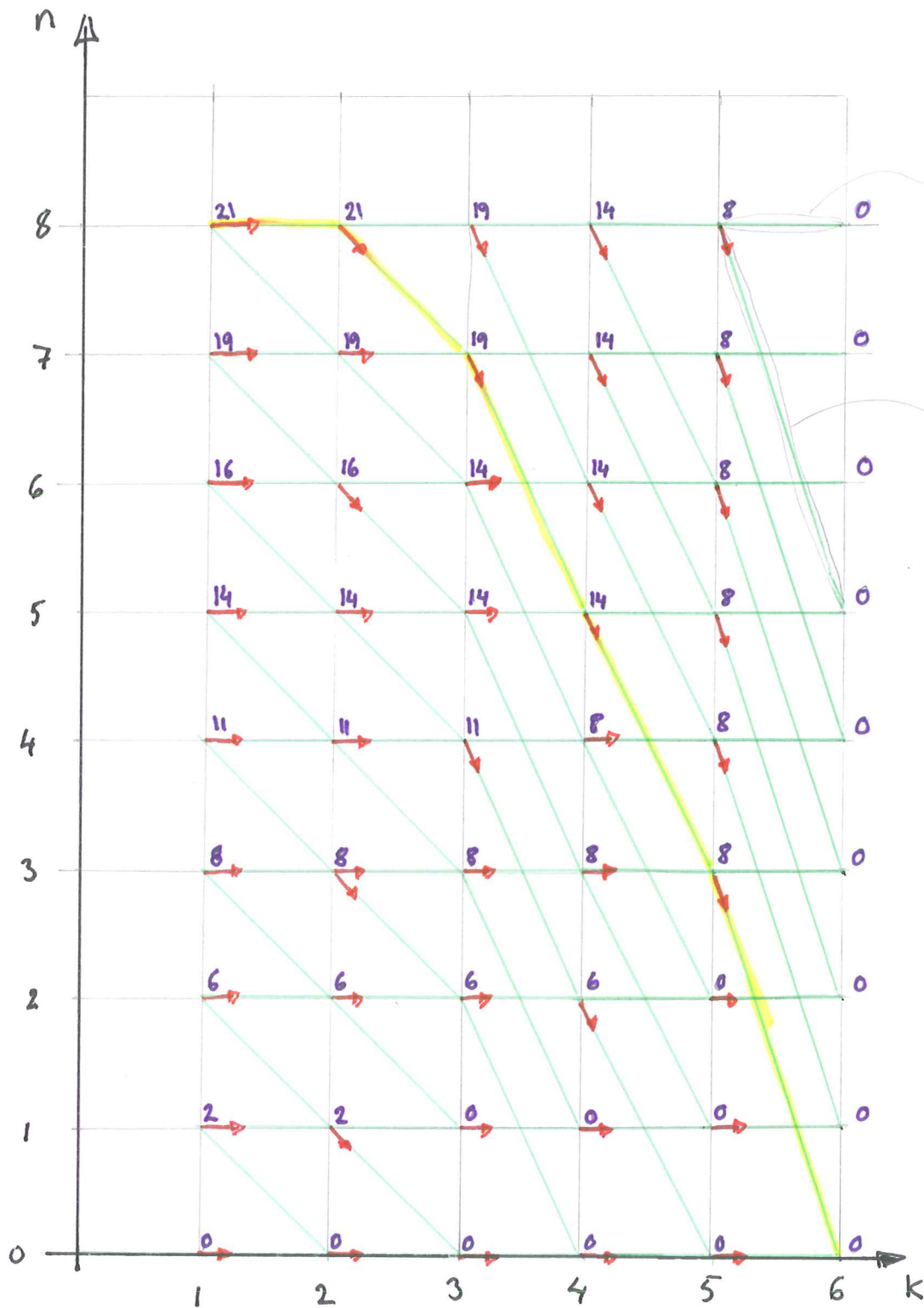


— = feasible path.

$f_k^n(n)$ = optimal utility starting at stage k with n spaces available.



path corresponding to $x_5 = 0$, i.e. not use app # 5.

path corresponding to $x_5 = 1$, i.e. use app # 5, reduces remaining free spaces by $w_5 = 3$ units, and adds $u_5 = 8$ to utility.

$w_1 = 1$ $w_1 = 1$ $w_3 = 2$ $w_4 = 2$ $w_5 = 3$
 $u_1 = 1$ $u_2 = 2$ $u_3 = 5$ $u_4 = 6$ $u_5 = 8$

$n = N = 8 \Rightarrow \text{optimal } \hat{x} = (0, 1, 1, 1, 1) \Rightarrow \text{optimal value} = 21$