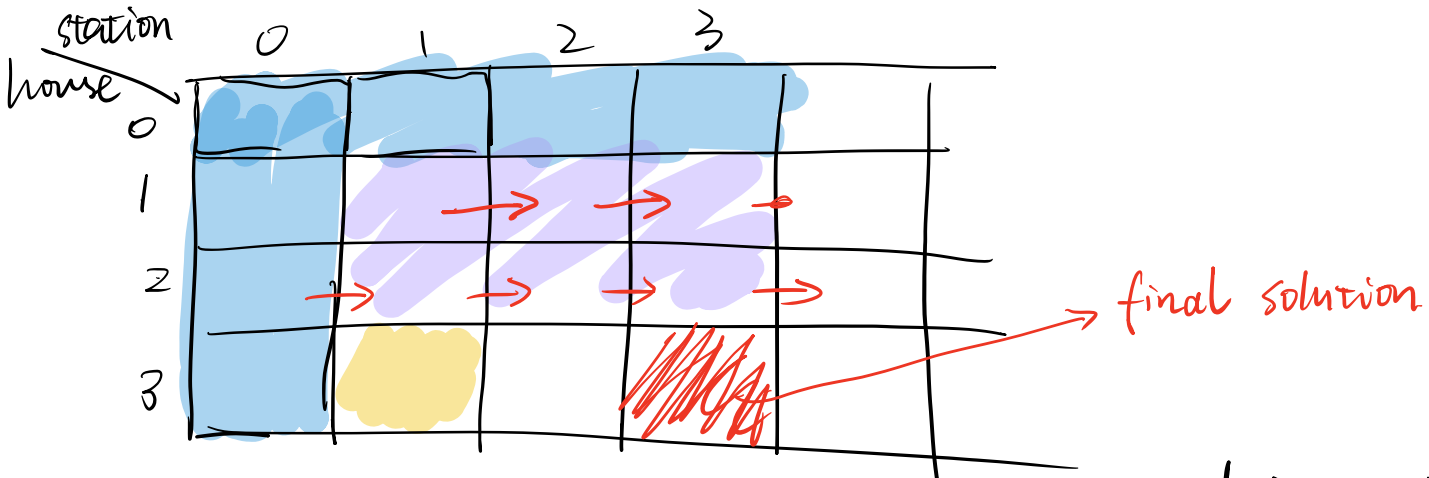


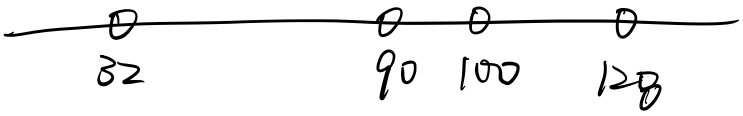
1. (i, j) definition: given first i house, and j stations
   subproblem — What's the optimal solution

2. base case: blue area, solve by inspection

3. fill out the rest empty table one by one, follow the red arrow

4. current subproblem: yellow part
   ↑
   use previous subproblem result to solve
   purple and blue part

Example 4 houses 2 station

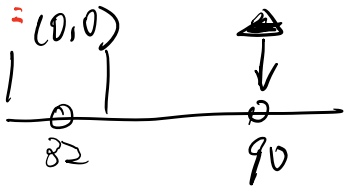


response time table

house \ station	0	1
0	0	0
1	29 → ①	0
2	34 → ②	5
3	48 → ⑤	19

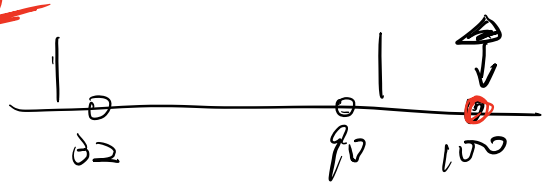
blue part: base case

① : (0,0)



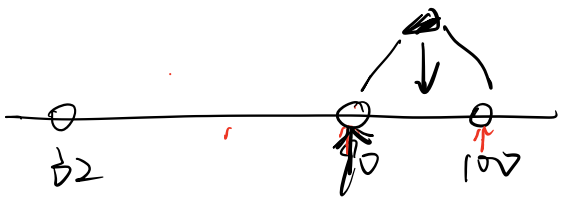
case 1: rest: 0, s_2: 0 → max: 0

②



response time

case 1: rest: r(1,0): 29, s_2: 0 → max: 29

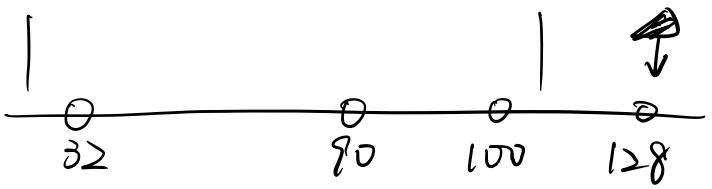


case 1: rest: r(0,0) = 0, s_2: 5 → max: 5

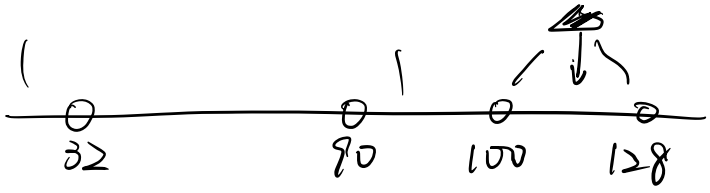
(n, m) n-1 possible cases

if start at i (2)
rest part house 0 – house i-1

③



case 1
rest: r(2,0) = 34, s_2: 0 → max 34

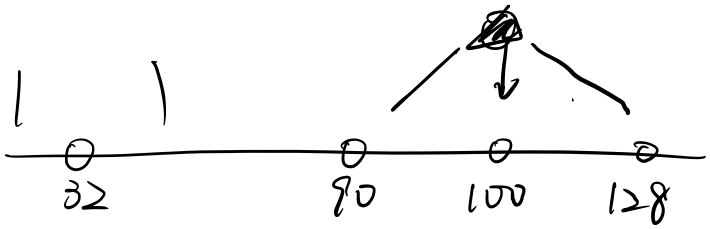


case 2

rest: $r(1,0) = 29$

$s_2 : 14$

> max 29



case 3

rest: $r(0,0) = 0$

$s_2 : 19$

> max 19