

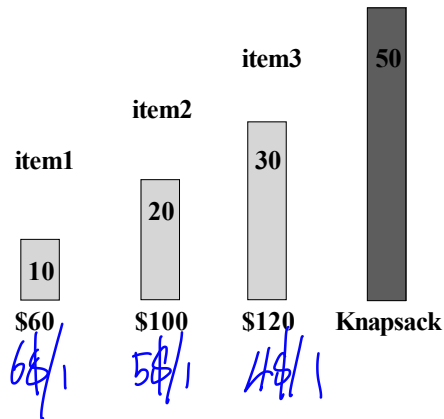
Review 9-1

1. Solve the following activity selection problem.

i	1	2	3	4	5	6	7	8	9	10	11
s_i	1	3	0	5	3	5	6	8	8	2	12
f_i	4	5	6	7	8	9	10	11	12	13	14

$\{a_1, a_4, a_9, a_{11}\}$

2. Solve the 0-1 knapsack and fractional knapsack problems for the following example.



(1) 0-1 knapsack

$$\max = \text{item}_2 + \text{item}_3 = 220\$$$

(2) fractional knapsack

store the max cost/weight item first
and then ...

item₁ 6\$/1
item₂ 5\$/1
item₃ 4\$/1

⇒ item₁ (10) item₂ (20) item₃ (20)

$$\Rightarrow 30; 60 + 100 + 80 = 240\$$$