

Knapsack Example:

$W = 10$

$$M[i,j] = \max\{ (V_i + M[i-1, j-W_i]), M[i-1, j] \}$$

i	1	2	3	4
$V_i$	10	40	30	50
$W_i$	5	4	6	3

M:

j

w →  
n ↓

0

1

2

3

4

5

6

7

8

9

10

0

0

0

0

0

0

0

0

0

0

0

1

0

0

0

0

10

10

10

10

10

10

2

0

0

0

0

40

40

40

40

40

50

50

3

0

0

0

0

40

40

40

40

40

50

70

4

0

0

0

50

50

50

50

90

90

90

90