```
KNAPSACK(n, W)
 1  for i ← 0 to n          ▷ no remaining capacity
 2        do M[i, 0] ← 0
 3  for w ← 0 to W          ▷ no item to choose from
 4        do M[0, w] ← 0
 5  for j ← 1 to n
 6        do for w ← 1 to W
 7              do if w_j > w
 8                    then M[j] = M[j − 1, w]
 9                    else M[j, w] ← MAX(v_j + M[j − 1, w − w_j],
                                        M[j − 1, w])
10  return M[n, W]
```

		1	2	3	4
w		2	3	4	5
v		3	4	5	7

n \ w	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	3	3	3	3	3	3	3	3
2	0	0	3	4	4	7	7	7	7	7
3	0	0	3	4	5	7	8	9	9	12
4	0	0	3	4	5	7	8	10	11	12