

		Knapsack Capacity																					
Item			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Wt	Val	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	1	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	4	2	0	0	3	4	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4	8	3	0	0	3	4	8	8	11	12	12	15	15	15	15	15	15	15	15	15	15	15	15
5	8	4	0	0	3	4	8	8	11	12	12	16	16	19	20	20	23	23	23	23	23	23	23
9	10	5	0	0	3	4	8	8	11	12	12	16	16	19	20	20	23	23	23	23	26	26	29

- Each cell holds the maximum value for a knapsack of the given capacity, using only items from that row or above. We can fill in the table from upper left to lower right.
- Each item is the maximum of either not adding the current item, or adding it. This means choosing the maximum of
 - The value above it
(we don't add the current item)
 - The value above and to the left by the item weight, plus the item value
(we add the current item, and maximize the use of the remaining weight)

For example the red 15 in cell $((4,8), 9)$, is the maximum of 7 (directly above) and 7 (the value above and 4 spaces to the left) plus 8.

		Knapsack Capacity																				
Item		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Wt	Val	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	18	1	0	0	0	0	0	0	0	0	0	18	18	18	18	18	18	18	18	18	18	18
4	4	2	0	0	0	0	4	4	4	4	4	4	18	18	18	18	22	22	22	22	22	22
17	10	3	0	0	0	0	4	4	4	4	4	4	18	18	18	18	22	22	22	22	22	22
18	19	4	0	0	0	0	4	4	4	4	4	4	18	18	18	18	22	22	22	22	22	22
5	10	5	0	0	0	0	4	10	10	10	10	14	18	18	18	18	22	28	28	28	28	32

		Knapsack Capacity																				
Item		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Wt	Val	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	11	11	11	11	11
13	7	2	0	0	0	0	0	0	0	0	0	0	0	0	7	11	11	11	11	11	11	11
14	17	3	0	0	0	0	0	0	0	0	0	0	0	0	7	17	17	17	17	17	17	17
10	16	4	0	0	0	0	0	0	0	0	0	16	16	16	16	17	17	17	17	17	17	17
7	6	5	0	0	0	0	0	0	6	6	6	16	16	16	16	17	17	17	22	22	22	22