To display how the MCP works visually, consider the matrices (dimensions): A_1 (5x4), A_2 (4x6), A_3 (6x6), A_4 (6x2). As the optimal solution structure says, set up an upper triangular matrix starting with 0's on the diagonal. Here $n=4$,

	1	2	3	4
1	0	120	264	160
2	∅	0	144	120
3	∅	∅	0	72
4	∅	∅	∅	0

Next, without making a decision, we compute the costs of an initial split.

- 1 and 2 costs 120 operations and gives a (5x6) matrix
- 2 and 3 costs 144 and gives a (4x6).
- 3 and 4 costs 72 and gives a (6x2).

(Eddy diagram for First step)

Next, the cost of the second choice is considered with respect to the first. This fills in the next diagonal "up".

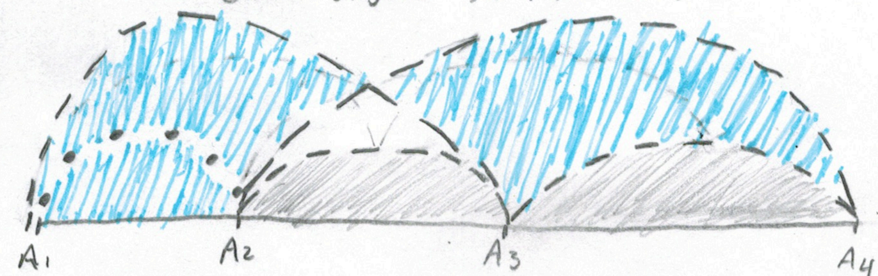
(Eddy diagram for this step)

$m[1,2]\,A_3 = 5x6x6 + 120 = 300$

$A_1\,m[2,3] = 5x4x6 + 144 = 264$

$m[2,3]\,A_4 = 4x6x2 + 144 = 192$

$A_2\,m[3,4] = 4x6x2 + 72 = 120$

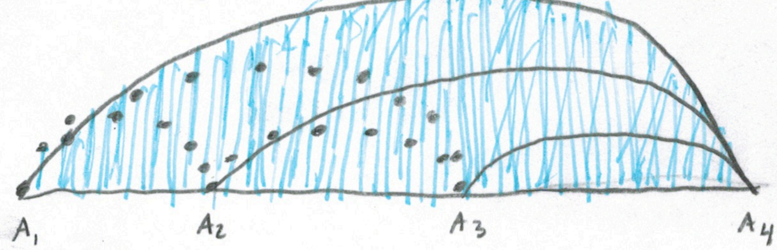


Finally, the cost of the final choice is considered, the top right corner.

(Eddy diagram for this step)

$m[1,3]\,A_4 = 5x6x2 + 264 = 324$

$A_1\,m[2,4] = 5x4x2 + 120 = 160$



The final consideration specifies that the optimal solution multiplies A_1 by optimal solution $m[2,4]$ which is A_2 multiplied by the optimal solution $m[3,4]$ which is the initial choice to parenthesize A_3 and A_4.

The tabular nature is evident.