Table method   201 columns S_i

sum

Pen/typ	0	1	2	3	⋯	198	199	200
1	1	1	1	1	⋯	1	1	1
2	1	1	2	2	⋯			
5	1	1	2	2				
10	1							
20	1							
50	1							
100	1							
200	1							

8 rows
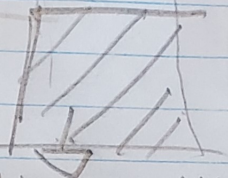
* This box will represent our final answer. why?

This is all 1 as if you use nothing, you get 0.

(Thus initialize all first col. elements as 1)

Each element in this 2-d array will represent the # of ways to use the values of its own row and values of the rows above to sum up and add upto the corresponding column value.

(initialize one-by-one during iteration)

* This is where all numbers were analyzed and are observed to make combinations that add upto 200.

Hilroy