1. $n=13 \Rightarrow A[1] \sim A[13],\ B[0] \sim B[12]$

Line 3. 4 :

$B[0]$: 0.01

$B[1]$: 0.15

$B[2]$: 0.23

$B[3]$: 0.27

$B[4]$:

$B[5]$:

$B[6]$:

$B[7]$: 0.57 → 0.59 → 0.61

$B[8]$: 0.69

$B[9]$: 0.76

$B[10]$: 0.79

$B[11]$: 0.87

$B[12]$: 0.99 → 0.98

Line 5·6:

B[0]: 0.01

B[1]: 0.15

B[2]: 0.23

B[3]: 0.27

B[4]:

B[5]:

B[6]:

B[7]: 0.57 → 0.59 → 0.61

B[8]: 0.69

B[9]: 0.76

B[10]: 0.79

B[11]: 0.87

B[12]: 0.98 → 0.99

Line 7:

0.01 → 0.15 → 0.23 → 0.27 → 0.57 → 0.59 → 0.61

→ 0.69 → 0.76 → 0.79 → 0.87 → 0.98 → 0.99

2.

1	2	3	4	5	
0	7500	8750	12750	20750	1
	0	3750	8750	17250	2
		0	3000	10500	3
			0	6000	4
				0	5

s: 2 3 4 5

1	1	3	3	1
	2	3	3	2
		3	3	3
			4	4

$A_1A_2 = 20 \times 25 \times 15 = 7500$

$A_2A_3 = 25 \times 15 \times 10 = 3750$

$A_3A_4 = 15 \times 10 \times 20 = 3000$

$A_4A_5 = 10 \times 20 \times 30 = 6000$

$A_1 \sim A_3$:

$(A_1A_2)A_3 = 7500 + 20 \times 15 \times 10 = 10500$ ∨

$A_1(A_2A_3) = 20 \times 25 \times 10 + 3750 = 8750$

$A_2 \sim A_4$:

$(A_2A_3)A_4 = 3750 + 25 \times 10 \times 20 = 8750$ ∧

$A_2(A_3A_4) = 25 \times 15 \times 20 + 3000 = 10500$

$A_3 \sim A_5$:

$(A_3A_4)A_5 = 3000 + 15 \times 20 \times 30 = 12000$ ∨

$A_3(A_4A_5) = 15 \times 10 \times 30 + 6000 = 10500$

$A_1 \sim A_4$:

$(A_1 A_2 A_3)A_4 = 8750 + 20 \times 10 \times 20 = 12750$

$A_1(A_2 A_3 A_4) = 20 \times 25 \times 20 + 8750 = 18750$

$(A_1 A_2)(A_3 A_4) = 7500 + 20 \times 15 \times 20 + 3000$

$= 16500$

$\therefore min = 12750$

$A_2 \sim A_5$:

$(A_2 A_3 A_4)A_5 = 8750 + 25 \times 20 \times 30 = 23750$

$A_2(A_3 A_4 A_5) = 25 \times 15 \times 30 + 10500 = 21750$

$(A_2 A_3)(A_4 A_5) = 3750 + 25 \times 10 \times 30 + 6000$

$= 17250$

$\therefore min = 17250$

$A_1 \sim A_5$:

$(A_1 A_2 A_3 A_4)A_5 = 12750 + 20 \times 20 \times 30$

$= 24750$

$A_1(A_2A_3A_4A_5) = 20 \times 25 \times 30 + 17250$

$= 32250$

$(A_1A_2A_3)(A_4A_5) = 8750 + 20 \times 10 \times 30 + 6000$

$= 20750$

$(A_1A_2)(A_3A_4A_5) = 7500 + 20 \times 15 \times 30 + 10500$

$= 27000$

$\therefore min = 20750$