

①

	15	10	10	5	30
10	3	6	8	11	5 ¹⁰
15	1 ¹⁵	9	3	2	7
30	4	2 ⁵	8 ¹⁰	2 ⁵	15 ¹⁰
5	9	1 ⁵	4	9	8
10	2 ⁰	4	2	11	1 ¹⁰

Cost of SCEM:

SCEM.

$$50 + 15 + 10 + 80 + 125 + 150 + 5 + 10 + 10 = 445$$

	15	10	10	5	30	
10	3	6	8	11	5 ¹⁰	0
15	1 ¹⁵	9	3	2	7	10 -5
30	4	2 ⁵	8 ¹⁰	2 ⁵	15 ¹⁰	10 10
5	9	1 ⁵	4	9	8	10 9
10	2 ⁰	4	2	11	1 ¹⁰	10 7
✓	6	10 -8	10 -2	10 15	5	

-3	14	10	-4	0 ¹⁰
0 ¹⁵	22	10	-8	10 7
-12	0 ⁵	0 ¹⁰	0 ⁵	0 ¹⁰
-6	0 ⁵	-3	-15	-6
0 ⁰	16	8	0	0 ¹⁰

t=5

ΔC = -75

	-3	14	10	-4	0 ¹⁰	u
	0 ¹⁵	22	10	-8	7	0
	-12	0 ¹⁰	0 ¹⁰	0	0 ¹⁰	0
	-6	0 ⁰	-3	-15 ⁵	-6	0
	0 ⁰	16	8	0	0 ¹⁰	0
v	0	0	0	-15	0	

	-3	14	10	11	0 ¹⁰
	0 ¹⁵	22	10	7	7
	-12	0 ¹⁰	0 ¹⁰	15	0 ¹⁰
	-6	0 ⁰	-3	0 ⁵	-6
	0 ⁰	16	8	15	0 ¹⁰

t = 0 ΔC = 0

	-3	14	10	11	0 ¹⁰	u
	0 ¹⁵	22	10	7	7	0
	-12 ⁰	0 ¹⁰	0 ¹⁰	15	0 ¹⁰	12
	-6	0 ⁰	-3	0 ⁵	-6	0
	0	16	8	15	0 ¹⁰	0
v	-12	0	0	0	0	

9	14	10	11	0'0
0'5	10	-2	-5	-5
00	0'0	0'0	15	0'0
6	0'0	-3	0'5	-6
12	16	8	15	0'0

t = 0

9	14	10	11	0'0
0'5	10	-2	5	-5
00	0'0	0'0	15	0'0
6	0	-3	0'5	-6
12	16	8	15	0'0

u
0
0
0
-6
0

v

0 0 0 ~~6~~ 0

9	14	10	15	0'0
0'5	10	-2	-11	-5
00	0'0	0'0	9	0'0
12	6	3	0'5	0'0
12	16	8	9	0'0

t = 5

$\Delta C = -55$

9	14	10	5	0 ¹⁰	0
0 ¹⁰	10	-2	-11 ⁵	-5	0
0 ⁵	0 ¹⁰	0 ¹⁰	9	0 ⁵	0
12	6	3	0	0 ⁵	0
12	16	8	9	0 ¹⁰	0
✓ 0	0	0	-11	0	0

9	14	10	16	0 ¹⁰	
0 ¹⁰	10	-2	0 ⁵	-5	
0 ⁵	0 ¹⁰	0 ¹⁰	20	0 ⁵	
12	6	3	11	0 ⁵	
12	16	8	20	0 ¹⁰	

t=5

ΔC = -25

9	14	10	16	0 ¹⁰	0
0 ⁵	10	-2	0 ⁵	-5 ⁵	-5
0 ¹⁰	0 ¹⁰	0 ¹⁰	20	0	-5
12	6	3	11	0 ⁵	0
12	16	8	20	0 ¹⁰	0
✓ 5	5	5	5	0	0

4	9	5	11	0 ¹⁰
0 ⁵	10	-2	0 ⁵	0 ⁵
0 ¹⁰	0 ¹⁰	0 ¹⁰	20	5
7	1	-2	6	0 ⁵
7	11	3	15	0 ¹⁰

$t = 5$

$\Delta C = -10$

4	9	5	11	0 ¹⁰
0 ⁵	10	-2 ⁵	0 ⁵	0 ⁵
0 ¹⁵	0 ¹⁰	0 ⁵	20	5
7	1	-2	6	0 ⁵
7	11	3	15	0 ¹⁰

u
0
0
2
0
0

✓ -2 -2 -2 0 0

6	11	7	11	0 ¹⁰
2	12	0 ⁵	0 ⁵	0 ⁵
0 ¹⁵	0 ¹⁰	0 ⁵	18	3
9	3	0	6	0 ⁵
9	13	5	15	0 ¹⁰

opt. ✓