

Summary

March 19, 2025

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0.0.1 Solution 0

Overall Data

Objective value (integral): 12

Vertex/Graph	In	Out	OA
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ADP	0	3	0
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ATP	3	0	0
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CO2	3	0	0
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CoASH	2	2	0
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Fdox	0	4	0
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Fdred	4	0	0
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H2O	0	1	0
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HCO3-	1	0	0
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MALIC ACID	1	2	1
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NAD+	0	1	0
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NADH	1	0	0
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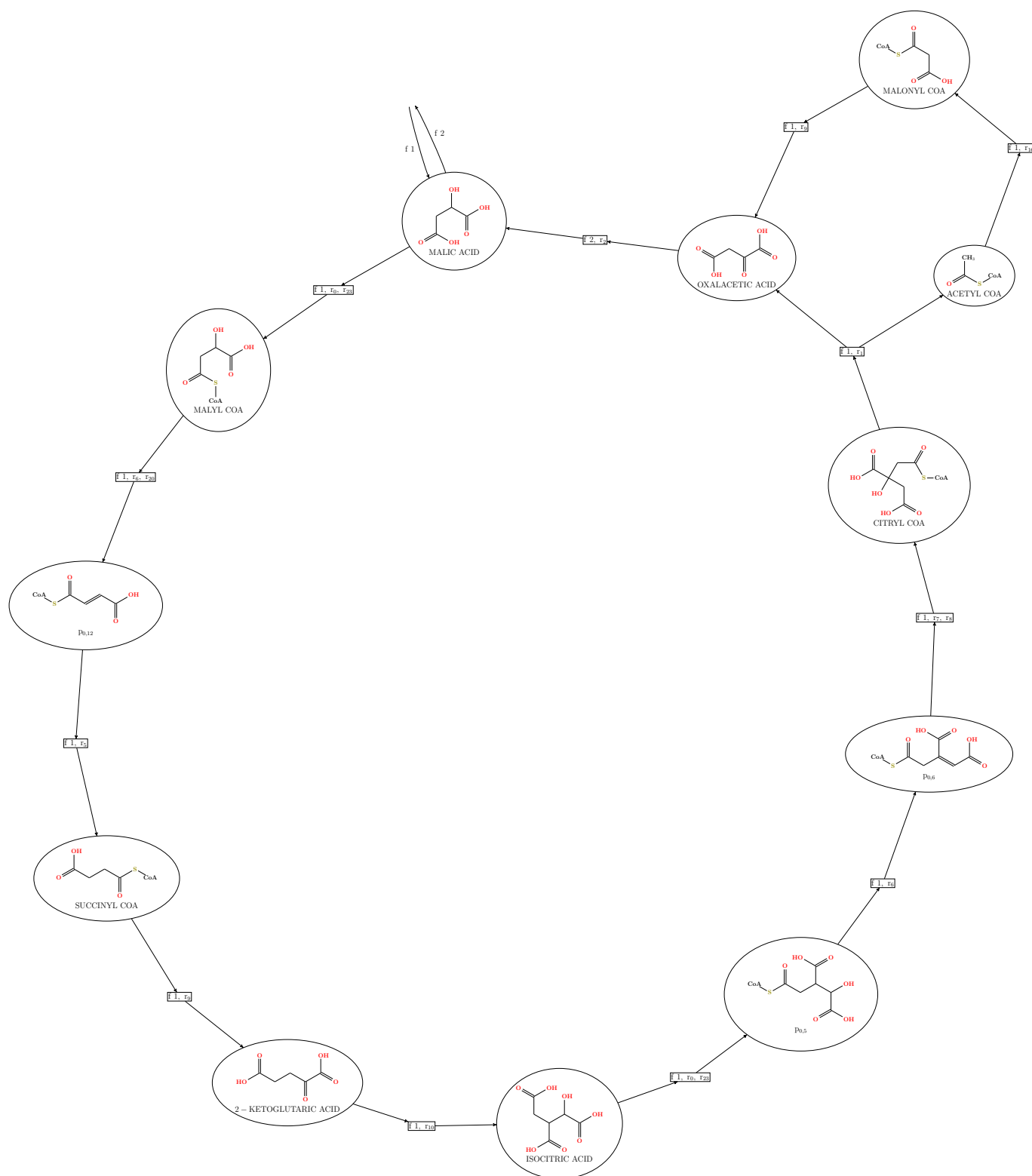
NADP+	0	3	0
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NADPH	3	0	0
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Pi	0	3	0
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hplus	9	0	0
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Filtered Graph



File: out/026_dg_0_11100_f_0_0_filt

0.0.2 Solution 1

Overall Data

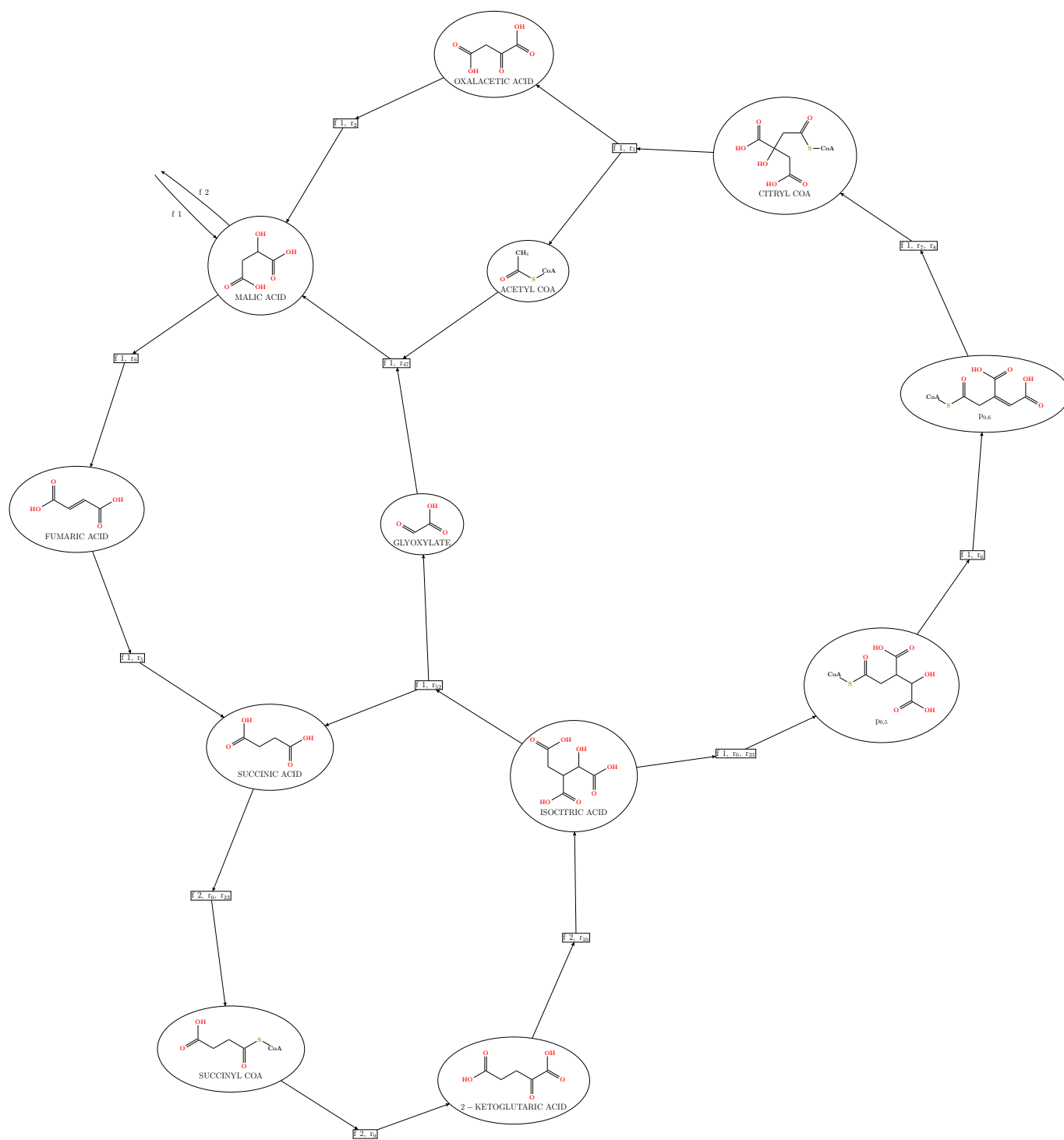
Objective value (integral): 12

Vertex/Graph	In	Out	OA
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0
25	0	0	0
26	0	0	0
27	0	0	0
28	0	0	0
29	0	0	0
30	0	0	0
31	0	0	0
32	0	0	0
33	0	0	0
34	0	0	0
35	0	0	0
36	0	0	0
37	0	0	0
38	0	0	0
39	0	0	0
40	0	0	0
41	0	0	0
42	0	0	0
43	0	0	0
44	0	0	0
45	0	0	0
46	0	0	0
47	0	0	0
48	0	0	0
49	0	0	0
50	0	0	0
51	0	0	0
52	0	0	0
53	0	0	0
54	0	0	0
55	0	0	0
56	0	0	0
57	0	0	0
58	0	0	0
59	0	0	0
60	0	0	0
61	0	0	0
62	0	0	0
63	0	0	0
64	0	0	0
65	0	0	0
66	0	0	0
67	0	0	0
68	0	0	0
69	0	0	0
70	0	0	0
71	0	0	0
72	0	0	0
73	0	0	0
74	0	0	0
75	0	0	0
76	0	0	0
77	0	0	0
78	0	0	0
79	0	0	0
80	0	0	0
81	0	0	0
82	0	0	0
83	0	0	0
84	0	0	0
85	0	0	0
86	0	0	0
87	0	0	0
88	0	0	0
89	0	0	0
90	0	0	0
91	0	0	0
92	0	0	0
93	0	0	0
94	0	0	0
95	0	0	0
96	0	0	0
97	0	0	0
98	0	0	0
99	0	0	0
100	0	0	0
101	0	0	0
102	0	0	0
103	0	0	0
104	0	0	0
105	0	0	0
106	0	0	0
107	0	0	0
108	0	0	0
109	0	0	0
110	0	0	0
111	0	0	0
112	0	0	0
113			

ADP 0 3 0

ATP	3	0	0
CO2	4	0	0
CoASH	1	1	0
Fdox	0	4	0
Fdred	4	0	0
H2O	1	1	0
MALIC ACID	1	2	1
NAD+	0	1	0
NADH	1	0	0
NADP+	0	3	0
NADPH	3	0	0
Pi	0	3	0
hplus	8	0	0

Filtered Graph



File: out/035_dg_0_11100_f_0_1_filt

0.0.3 Solution 2

Overall Data

Objective value (integral): 12

Vertex/Graph	In	Out	OA
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0
25	0	0	0
26	0	0	0
27	0	0	0
28	0	0	0
29	0	0	0
30	0	0	0
31	0	0	0
32	0	0	0
33	0	0	0
34	0	0	0
35	0	0	0
36	0	0	0
37	0	0	0
38	0	0	0
39	0	0	0
40	0	0	0
41	0	0	0
42	0	0	0
43	0	0	0
44	0	0	0
45	0	0	0
46	0	0	0
47	0	0	0
48	0	0	0
49	0	0	0
50	0	0	0
51	0	0	0
52	0	0	0
53	0	0	0
54	0	0	0
55	0	0	0
56	0	0	0
57	0	0	0
58	0	0	0
59	0	0	0
60	0	0	0
61	0	0	0
62	0	0	0
63	0	0	0
64	0	0	0
65	0	0	0
66	0	0	0
67	0	0	0
68	0	0	0
69	0	0	0
70	0	0	0
71	0	0	0
72	0	0	0
73	0	0	0
74	0	0	0
75	0	0	0
76	0	0	0
77	0	0	0
78	0	0	0
79	0	0	0
80	0	0	0
81	0	0	0
82	0	0	0
83	0	0	0
84	0	0	0
85	0	0	0
86	0	0	0
87	0	0	0
88	0	0	0
89	0	0	0
90	0	0	0
91	0	0	0
92	0	0	0
93	0	0	0
94	0	0	0
95	0	0	0
96	0	0	0
97	0	0	0
98	0	0	0
99	0	0	0
100	0	0	0

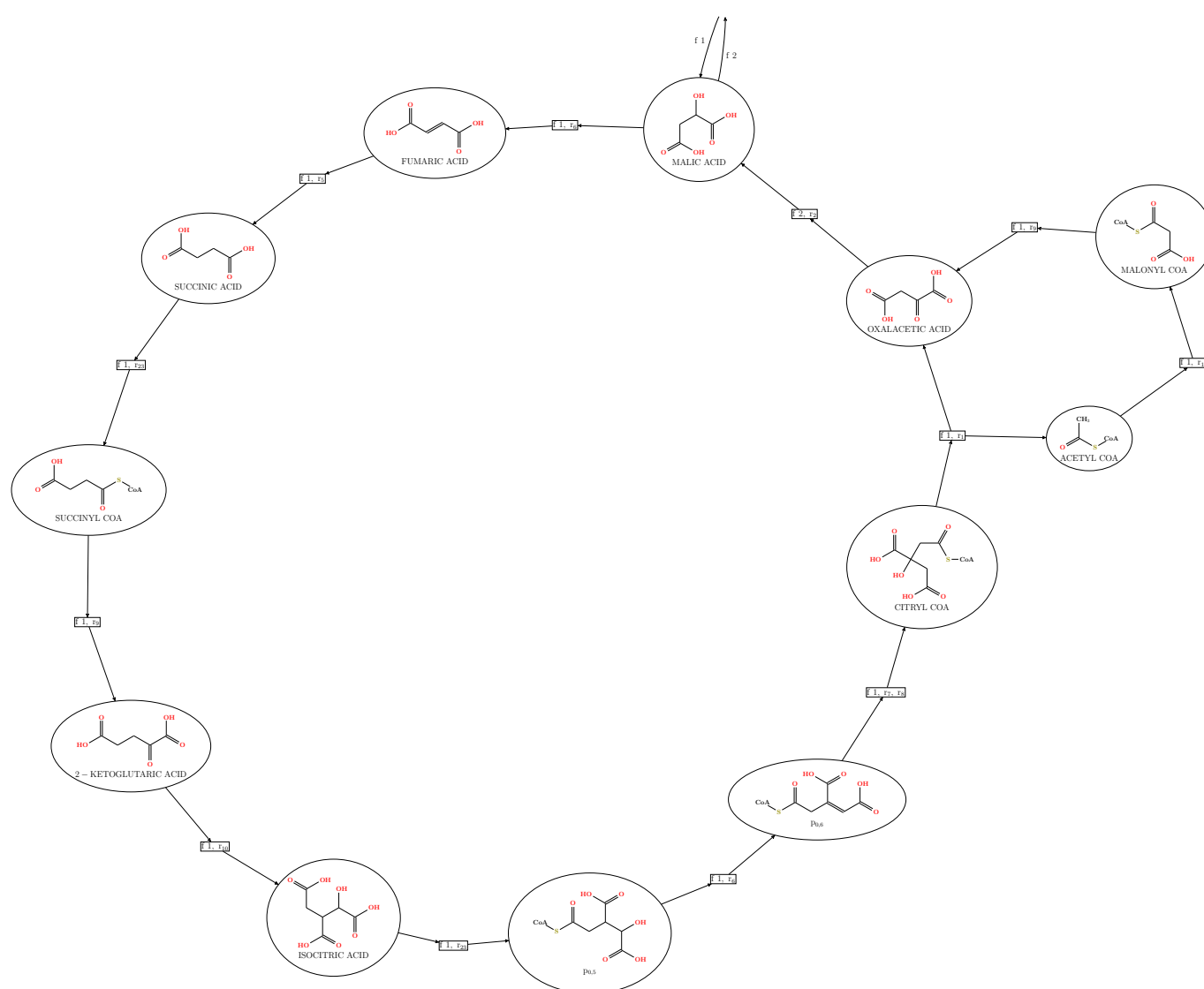
AMP 0 2 0

$$\text{ATP} \quad 2 \quad 0 \quad 0$$

CO2 3 0 0

Fdox	0	4	0
Fdred	4	0	0
H2O	0	1	0
HCO3-	1	0	0
MALIC ACID	1	2	1
NAD+	0	1	0
NADH	1	0	0
NADP+	0	3	0
NADPH	3	0	0
PPi	0	1	0
Pi	0	2	0
hplus	9	0	0

Filtered Graph



File: out/038_dg_0_11100_f_0_2_filt

0.0.4 Solution 3

Overall Data

Objective value (integral): 12

Vertex/Graph	In	Out	OA
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ADP	1	1	0
-----	---	---	---

AMP	0	2	0
-----	---	---	---

ATP	2	0	0
-----	---	---	---

CO2	3	0	0
-----	---	---	---

Fdox	0	4	0
------	---	---	---

Fdred	4	0	0
-------	---	---	---

H2O	0	1	0
-----	---	---	---

HCO3-	1	0	0
-------	---	---	---

MALIC ACID	1	2	1
------------	---	---	---

NAD+	0	1	0
------	---	---	---

NADH	1	0	0
------	---	---	---

NADP+	0	3	0
-------	---	---	---

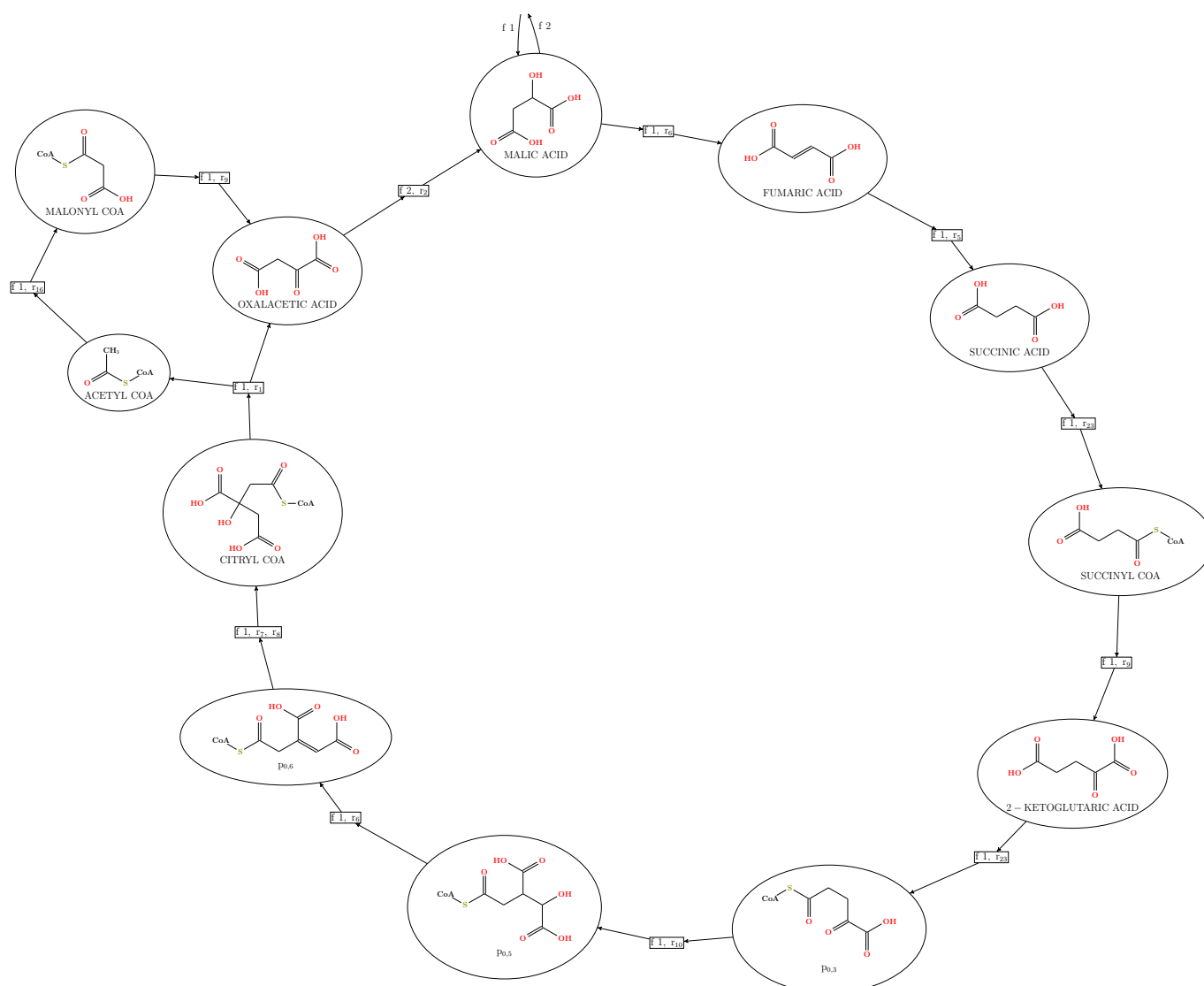
NADPH	3	0	0
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PPi	0	1	0
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Pi	0	2	0
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hplus	9	0	0
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Filtered Graph



File: out/043_dg_0_11100_f_0_3_filt

0.0.5 Solution 4

Overall Data

Objective value (integral): 12

Vertex/Graph In Out OA

ADP	1	0	0
AMP	0	3	0
ATP	2	0	0
CO2	4	0	0
Fdox	0	4	0
Fdred	4	0	0
H2O	1	1	0
MALIC ACID	1	2	1
NAD+	0	1	0
NADH	1	0	0

