Summary

October 16, 2019

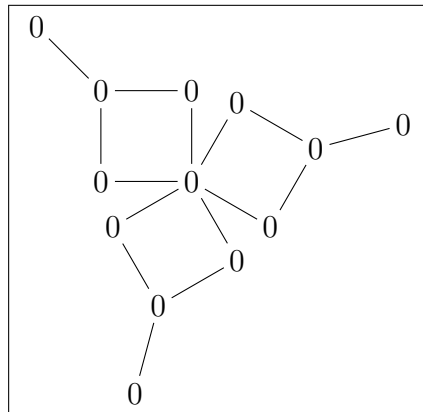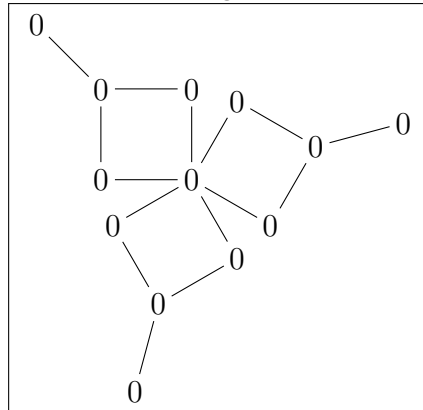# Contents

0.1 Loaded Graphs

0.1.1 Goal

File: out/000_g_0_10300000

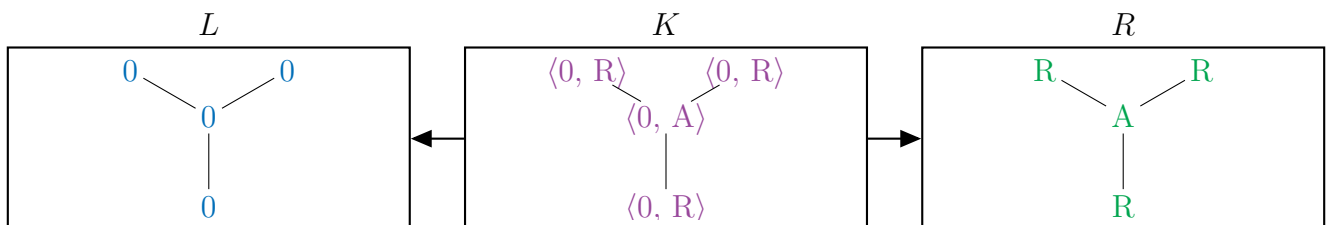File: out/000_g_0_11310100

0.1.2 Start
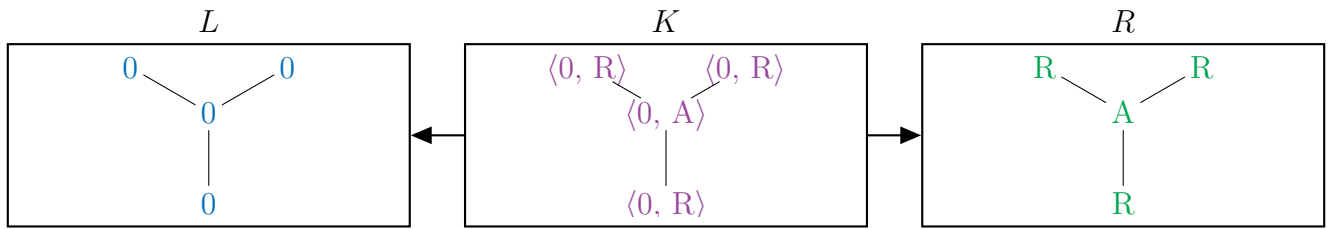

File: out/001_g_1_10300000

File: out/001_g_1_11310100

0.2 Loaded Rules

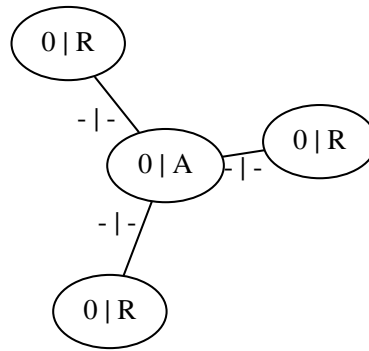### 0.2.1 Mark for conversion

Files: out/003__r__0__10300000__{L, K, R}

Files: out/004_r_0_11300100_{L, K, R}

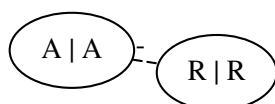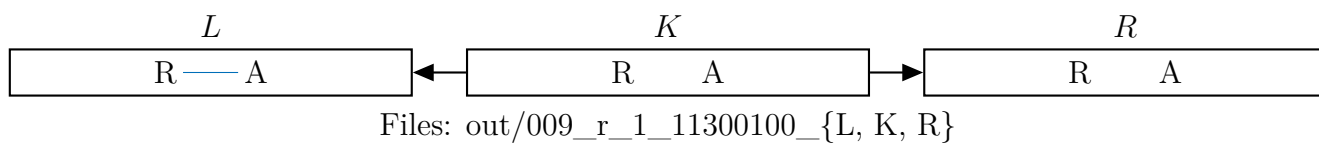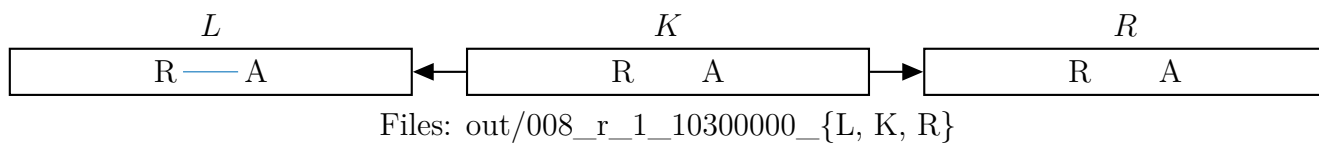File: out/005_r_0_combined

$$|\{e \in \mathrm{outEdges}(0)\}| = 3$$

$$|\{e \in \mathrm{outEdges}(0) \mid$$
$$\quad \mathrm{label}(\mathrm{target}(e)) \in \{\text{`0'}\}$$
$$\}| = 3$$

$$|\{e \in \mathrm{outEdges}(1) \mid$$
$$\quad \mathrm{label}(\mathrm{target}(e)) \in \{\text{`R'}, \text{`A'}\}$$
$$\}| = 0$$

$$|\{e \in \mathrm{outEdges}(2) \mid$$
$$\quad \mathrm{label}(\mathrm{target}(e)) \in \{\text{`R'}, \text{`A'}\}$$
$$\}| = 0$$

$$|\{e \in \mathrm{outEdges}(3) \mid$$
$$\quad \mathrm{label}(\mathrm{target}(e)) \in \{\text{`R'}, \text{`A'}\}$$
$$\}| = 0$$

0.2.2 RemoveSingleR

L	K	R
R —— A	R A	R A

Files: out/008_r_1_10300000_{L, K, R}

L	K	R
R —— A	R A	R A

Files: out/009_r_1_11300100_{L, K, R}

File: out/010_r_1_combined

0.2.3 reattachExternalEdge

Files: out/013_r_2_10300000_{L, K, R}

Files: out/014_r_2_11300100_{L, K, R}
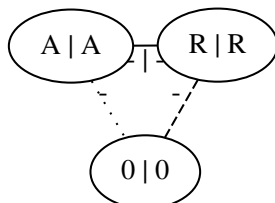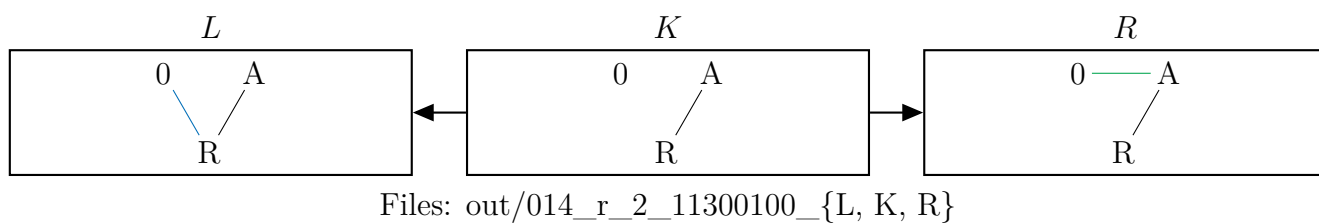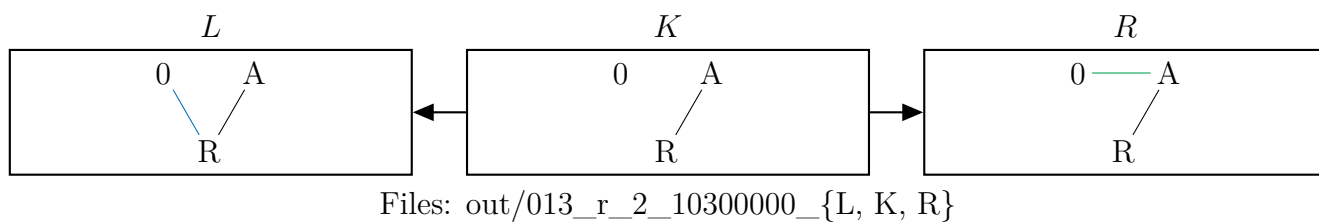
File: out/015_r_2_combined

0.2.4 removeInterREdge

L		K		R	
R —— R		R R		R R	

Files: out/018_r_3_10300000_{L, K, R}

L		K		R	
R —— R		R R		R R	

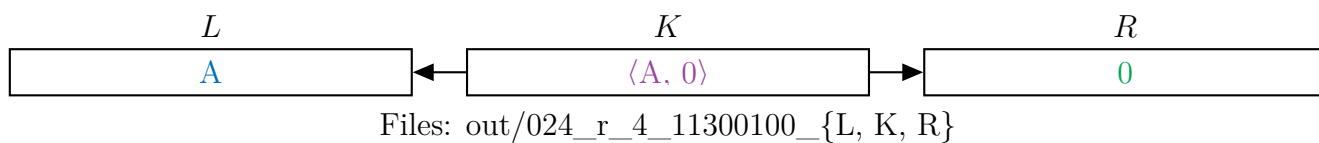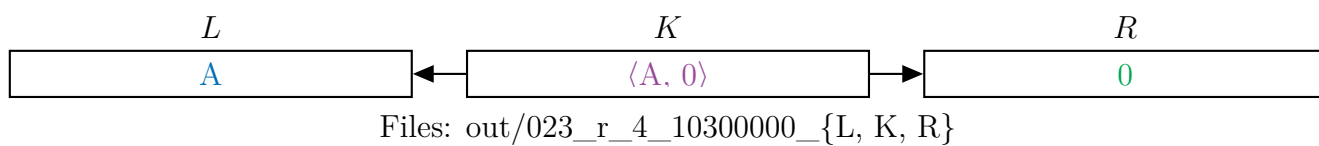Files: out/019_r_3_11300100_{L, K, R}

R | R - R | R
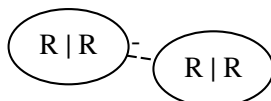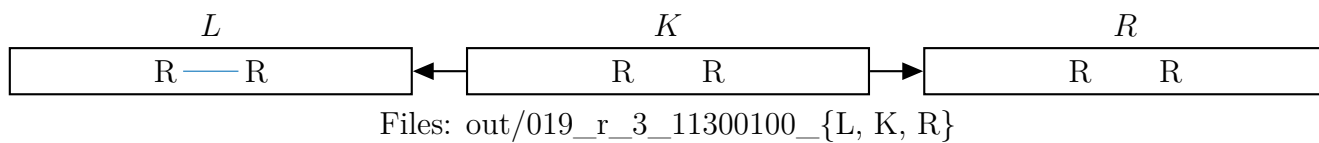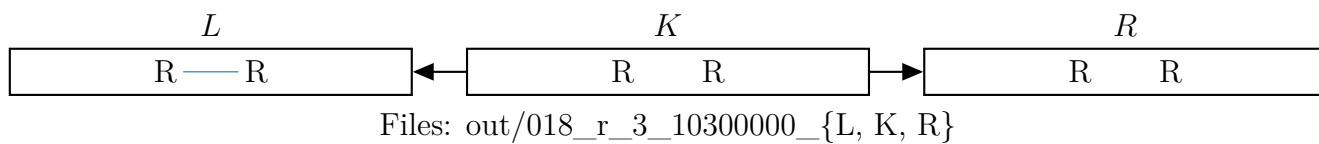
File: out/020_r_3_combined

$$|\{e \in \text{outEdges}(0) \ |$$
$$\quad \text{label}(\text{target}(e)) \in \{\text{`A'}, \text{`0'}\}$$
$$\}| = 0$$

$$|\{e \in \text{outEdges}(1) \ |$$
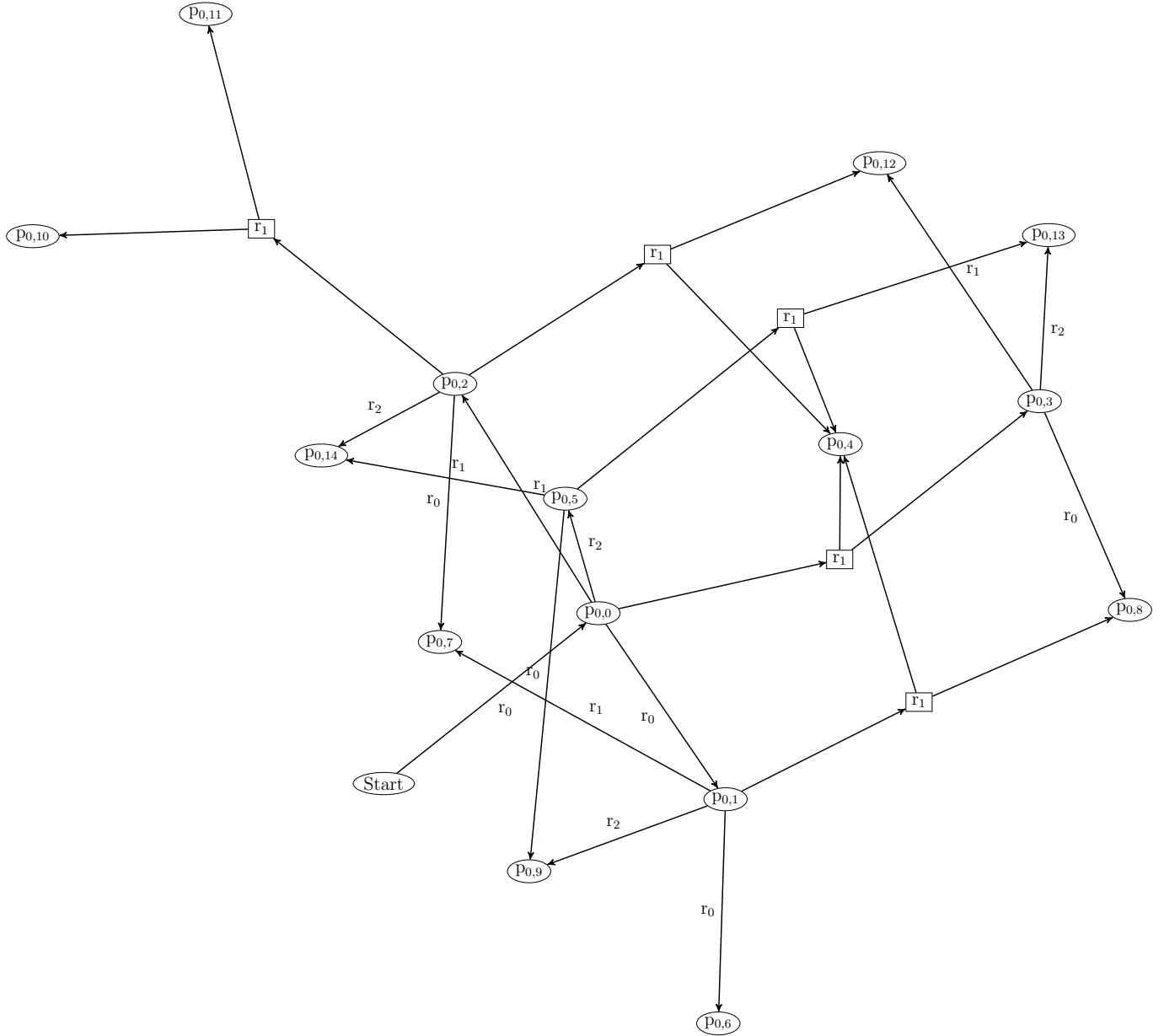$$\quad \text{label}(\text{target}(e)) \in \{\text{`A'}, \text{`0'}\}$$
$$\}| = 0$$

0.2.5 unmarkCollapsedNode

L	K	R
A	$\langle A, 0 \rangle$	0

Files: out/023_r_4_10300000_{L, K, R}

L	K	R
A	$\langle A, 0 \rangle$	0

Files: out/024_r_4_11300100_{L, K, R}

A | 0

File: out/025_r_4_combined

$$|\{e \in \text{outEdges}(0) \mid$$
$$\text{label}(\text{target}(e)) \in \{\text{`R'}\}$$
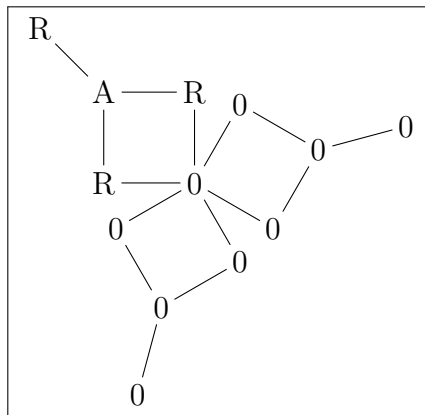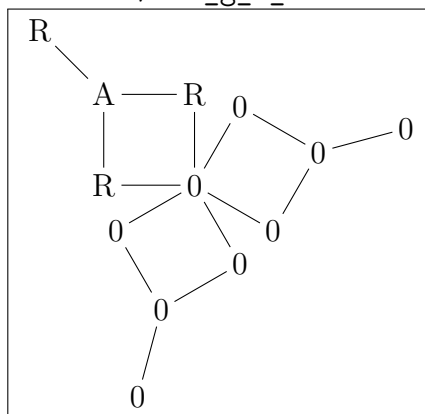$$\}| = 0$$

0.2.6 DG Hyper, `dg_0`

File: `out/028_dg_0_10100`
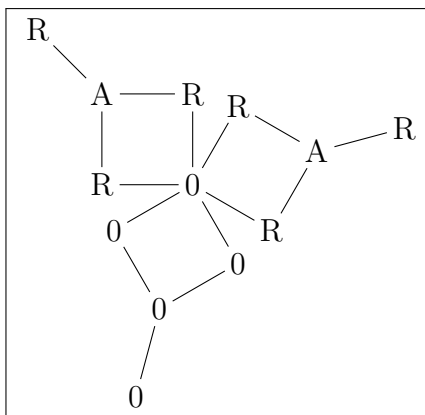
0.3 Product Graphs
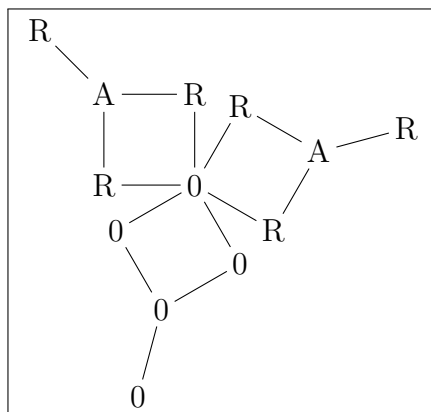
0.3.1 p_{0,0}

File: out/029_g_2_10300000

File: out/029_g_2_11310100

0.3.2 p_{0,1}
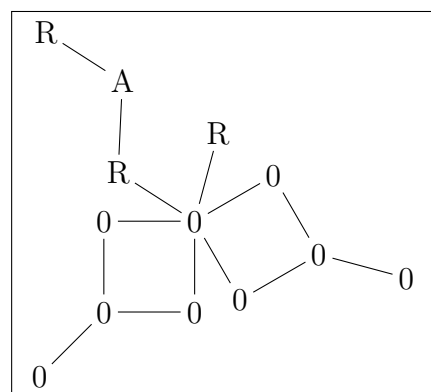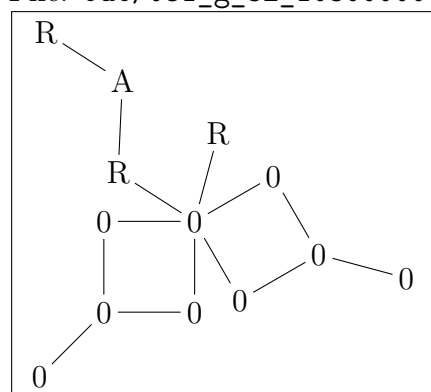

File: out/030_g_20_10300000
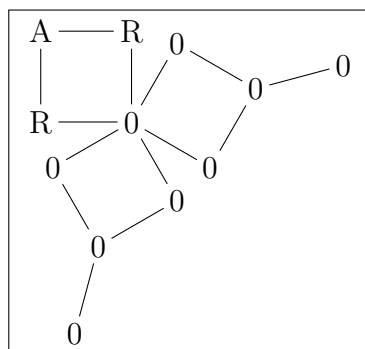
File: out/030_g_20_11310100

0.3.3 p_{0,2}

File: out/031_g_32_10300000
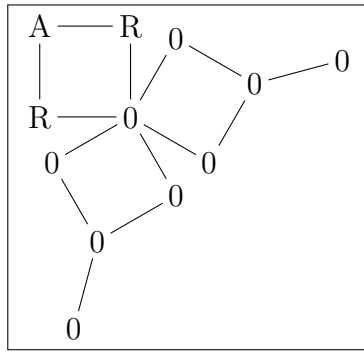

File: out/031_g_32_11310100

0.3.4 p_{0,3}

File: out/032_g_34_10300000
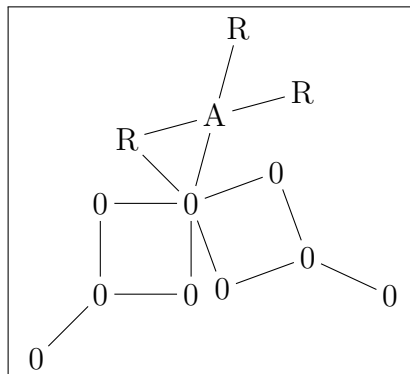
File: out/032_g_34_11310100

0.3.5 p_{0,4}

File: out/033_g_35_10300000
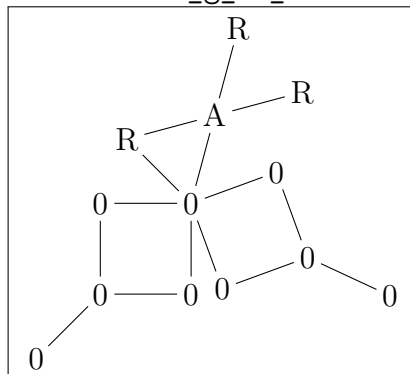

File: out/033_g_35_11310100

0.3.6 p_{0,5}

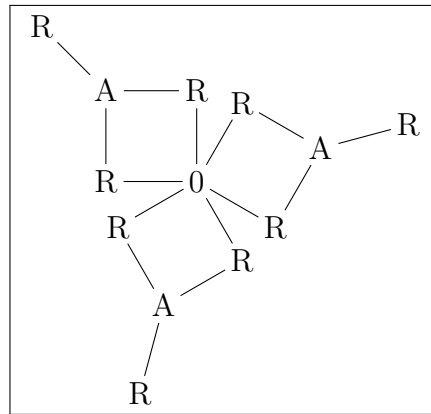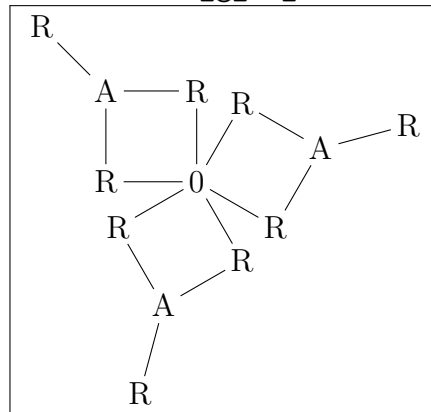File: out/034_g_36_10300000
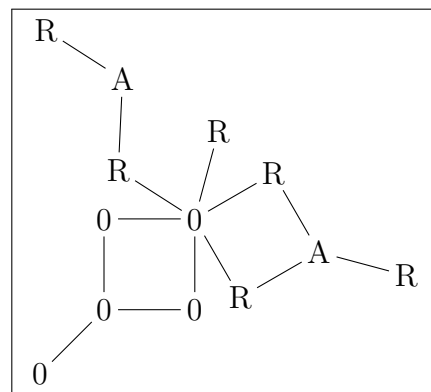

File: out/034_g_36_11310100

0.3.7 p_{0,6}

File: out/035_g_38_10300000

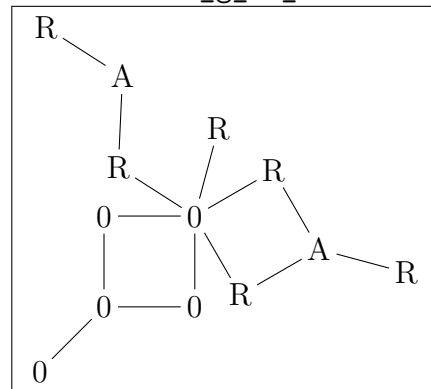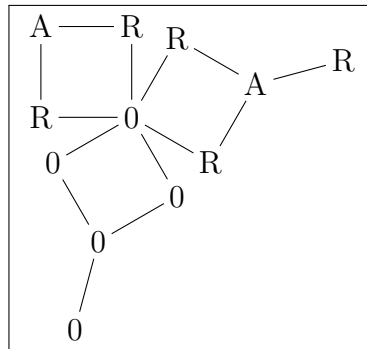

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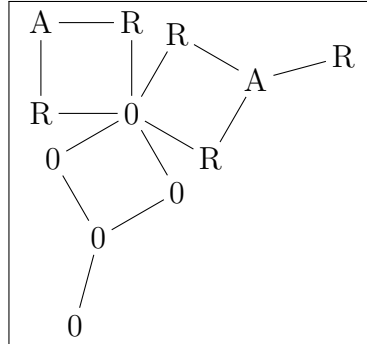### 0.3.8 p_{0,7}

File: out/036_g_44_10300000

File: out/036_g_44_11310100

0.3.9 p_{0,8}

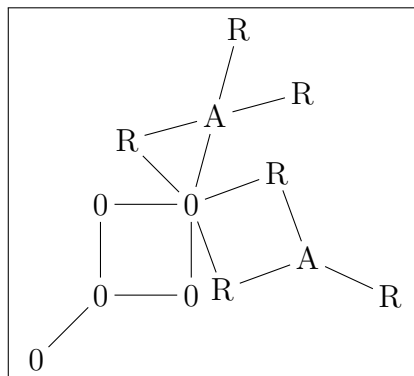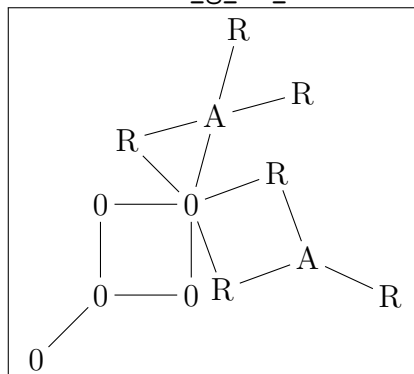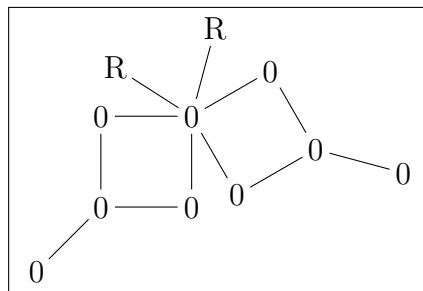
File: out/037_g_56_10300000

File: out/037_g_56_11310100

0.3.10 p_{0,9}

File: out/038_g_68_10300000

File: out/038_g_68_11310100

0.3.11 p_{0,10}

R
R   0
0 — 0   0
0   0
0 — 0   0
0

File: out/039_g_88_10300000

R
R   0
0 — 0   0
0   0
0 — 0   0
0
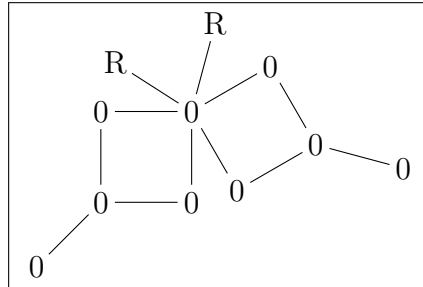
File: out/039_g_88_11310100

0.3.12 p_{0,11}

R —— A
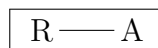
File: out/040_g_89_10300000

R —— A

File: out/040_g_89_11310100

0.3.13 p_{0,12}

A
R
R   0
0 — 0   0
0   0
0 — 0   0
0
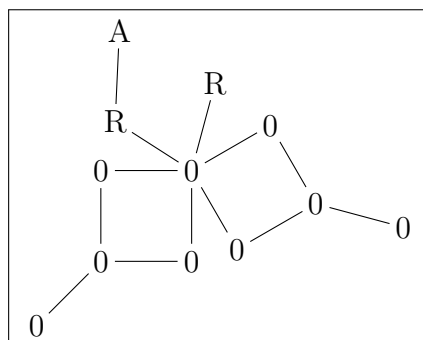
File: out/041_g_90_10300000

A
R
R   0
0 — 0   0
0   0
0 — 0   0
0
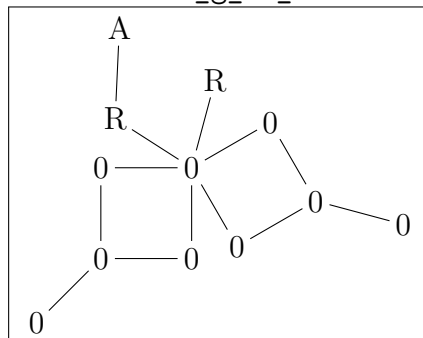
File: out/041_g_90_11310100

0.3.14 p_{0,13}

R
A
R
0   0   0
        0   0
0   0   0   0   0
0
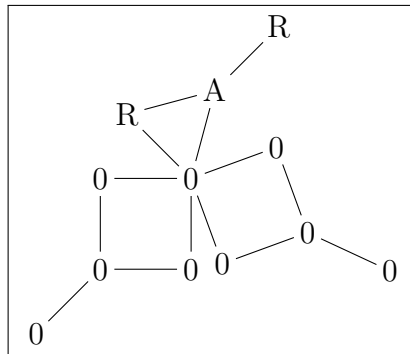
File: out/042_g_94_10300000

R
A
R
0   0   0
        0
0   0   0   0   0
0
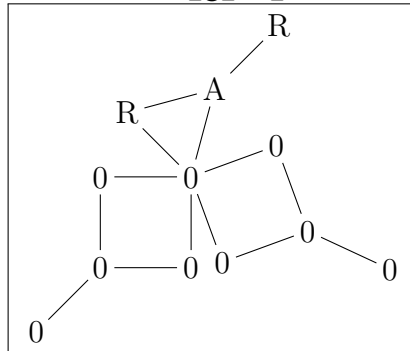
File: out/042_g_94_11310100

0.3.15 p_{0,14}

R
R
A
R   0   0   0
            0   0
0   0   0   0   0
0
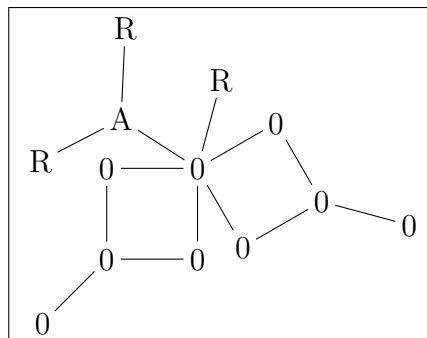
File: out/043_g_96_10300000

R
R
A
R   0   0   0
            0   0
0   0   0   0   0
0
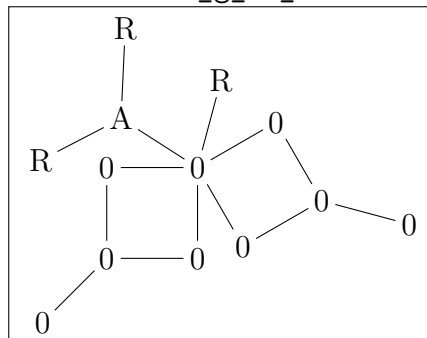
File: out/043_g_96_11310100

0.4 Flow Solutions, id 0