

Input PD code or string to snappy (use to reproduce the drawing):

4_1

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 7
Pinning number: 4
Average optimal gonality: 2.5
Average minimal gonality: 2.5
Average overall gonality: 2.58

Table 1: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	Total
Optimal pinning sets	2	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0
Nonminimal pinning sets	0	4	1	5
Average gonality	2.5	2.6	2.67	

Table 2: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 5}	4	[2, 3, 3, 2]	2.5
B (optimal)	●	{1, 3, 5, 6}	4	[2, 3, 2, 3]	2.5

0

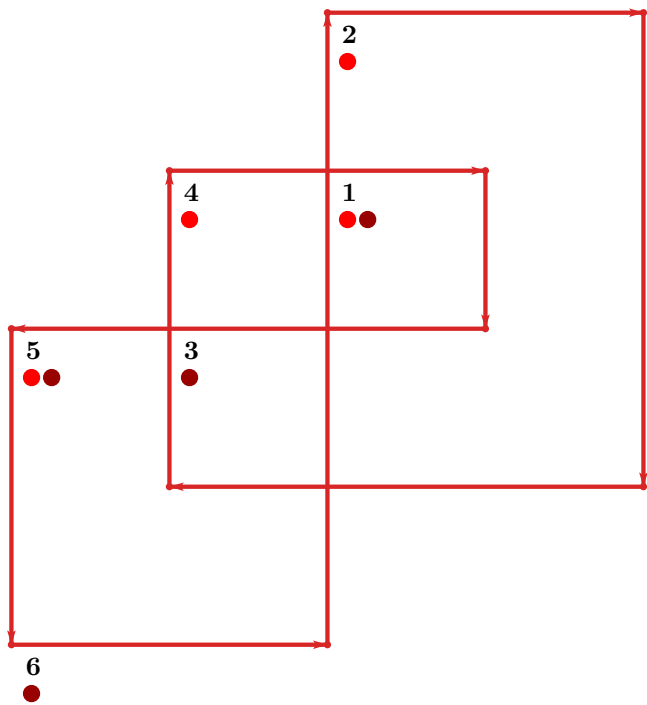


Figure 1: Snappy loop plot.



Figure 2: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

6_2

Total optimal pinning sets: 1
 Total minimal pinning sets: 2
 Total pinning sets: 20
 Pinning number: 4
 Average optimal gonality: 2.25
 Average minimal gonality: 2.33
 Average overall gonality: 2.72

Table 3: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	Total
Optimal pinning sets	1	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	1
Nonminimal pinning sets	0	4	8	5	1	18
Average gonality	2.25	2.52	2.75	2.91	3.0	

Table 4: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{2, 3, 5, 7}	4	[2, 3, 2, 2]	2.25
a (minimal)	●	{1, 2, 4, 5, 7}	5	[3, 2, 3, 2, 2]	2.4

0

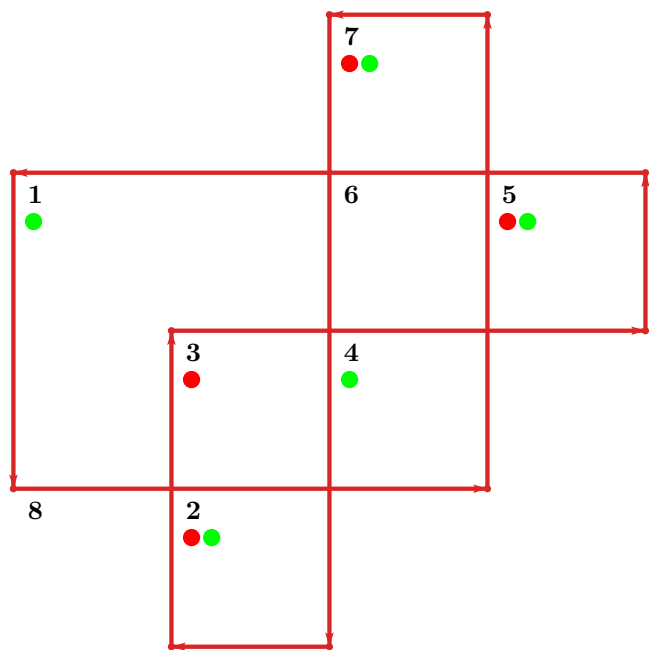


Figure 3: Snappy loop plot.



Figure 4: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
6_3

Total optimal pinning sets: 3
Total minimal pinning sets: 3
Total pinning sets: 32
Pinning number: 4
Average optimal gonality: 2.5
Average minimal gonality: 2.5
Average overall gonality: 2.8

Table 5: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	Total
Optimal pinning sets	3	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	0	0	0	0	0
Nonminimal pinning sets	0	10	12	6	1	29
Average gonality	2.5	2.72	2.86	2.95	3.0	

Table 6: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 5}	4	[2, 2, 3, 3]	2.5
B (optimal)	●	{1, 2, 5, 6}	4	[2, 2, 3, 3]	2.5
C (optimal)	●	{1, 2, 6, 7}	4	[2, 2, 3, 3]	2.5

0

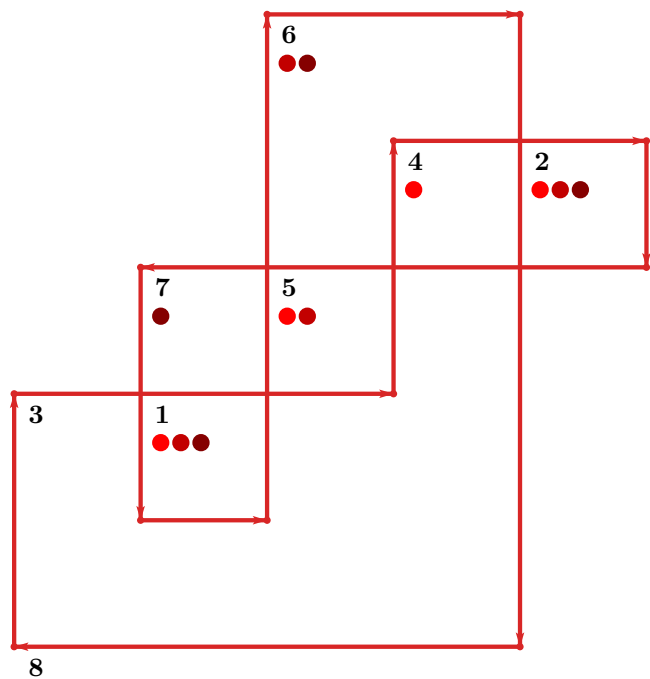


Figure 5: Snappy loop plot.

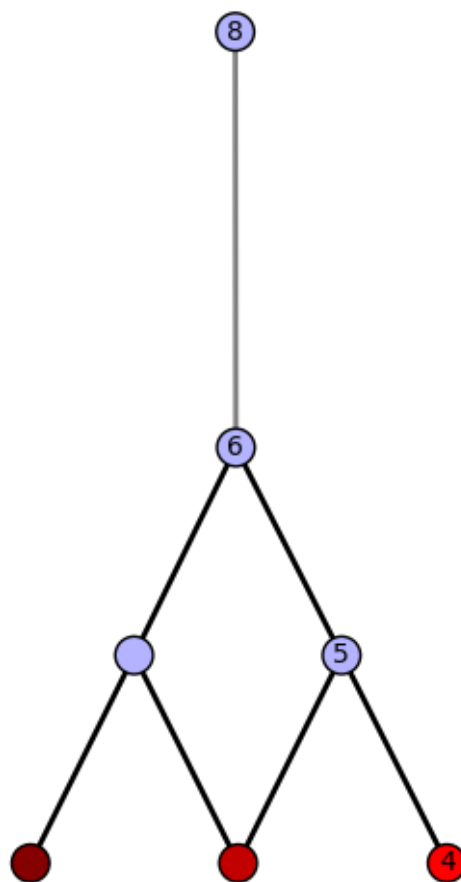


Figure 6: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

7_4

Total optimal pinning sets: 4
Total minimal pinning sets: 4
Total pinning sets: 30
Pinning number: 5
Average optimal gonality: 2.3
Average minimal gonality: 2.3
Average overall gonality: 2.75

Table 7: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	Total
Optimal pinning sets	4	0	0	0	0	4
Minimal (suboptimal) pinning sets	0	0	0	0	0	0
Nonminimal pinning sets	0	10	10	5	1	26
Average gonality	2.3	2.67	2.86	3.0	3.11	

Table 8: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 6, 8}	5	[2, 2, 2, 2, 3]	2.2
B (optimal)	●	{1, 2, 5, 6, 7}	5	[2, 2, 2, 2, 4]	2.4
C (optimal)	●	{1, 2, 4, 5, 6}	5	[2, 2, 3, 2, 2]	2.2
D (optimal)	●	{1, 2, 3, 5, 6}	5	[2, 2, 4, 2, 2]	2.4

0

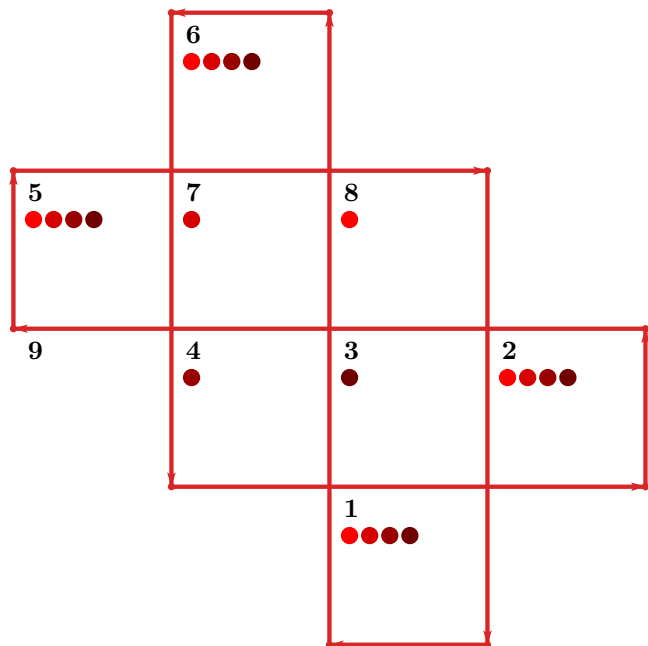


Figure 7: Snappy loop plot.

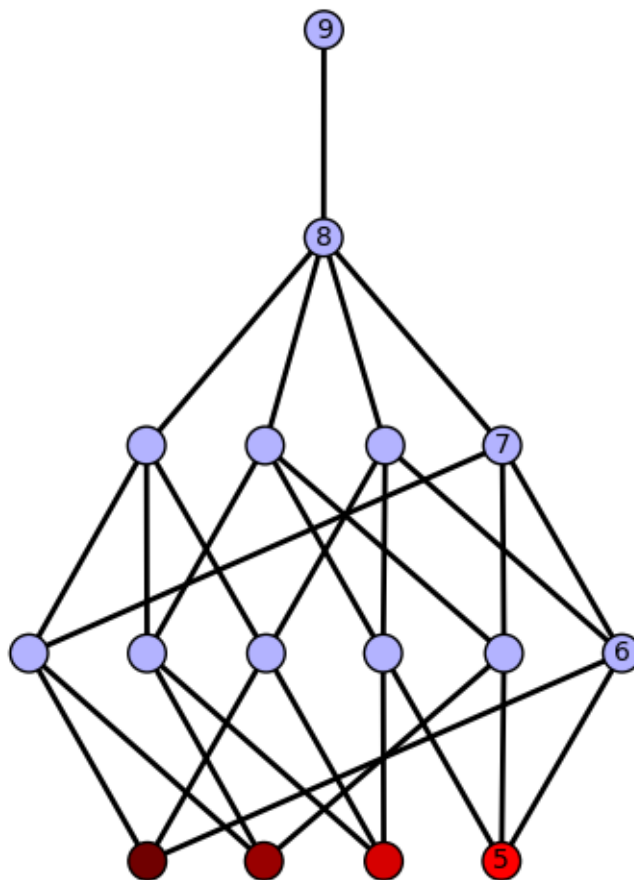


Figure 8: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
7_6

Total optimal pinning sets: 1
Total minimal pinning sets: 3
Total pinning sets: 44
Pinning number: 4
Average optimal gonality: 2.25
Average minimal gonality: 2.42
Average overall gonality: 2.82

Table 9: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	Total
Optimal pinning sets	1	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	2	0	0	0	0	2
Nonminimal pinning sets	0	5	15	14	6	1	41
Average gonality	2.25	2.54	2.78	2.94	3.04	3.11	

Table 10: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 4, 8}	4	[2, 3, 2, 2]	2.25
a (minimal)	●	{1, 2, 4, 7, 8}	5	[2, 3, 2, 3, 2]	2.4
b (minimal)	●	{1, 2, 4, 6, 8}	5	[2, 3, 2, 4, 2]	2.6

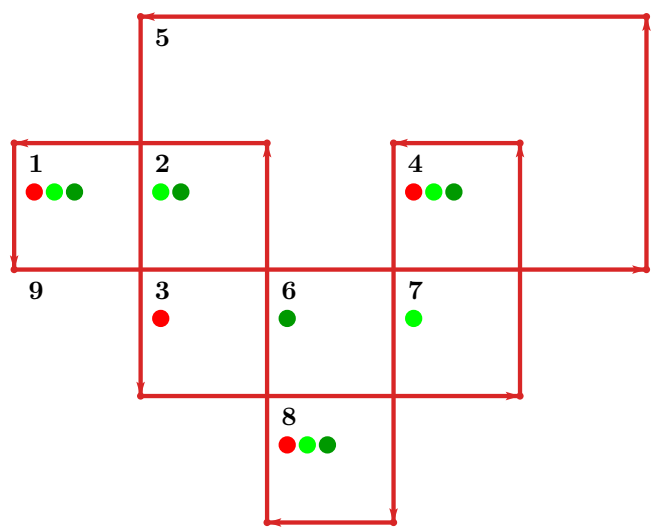


Figure 9: Snappy loop plot.

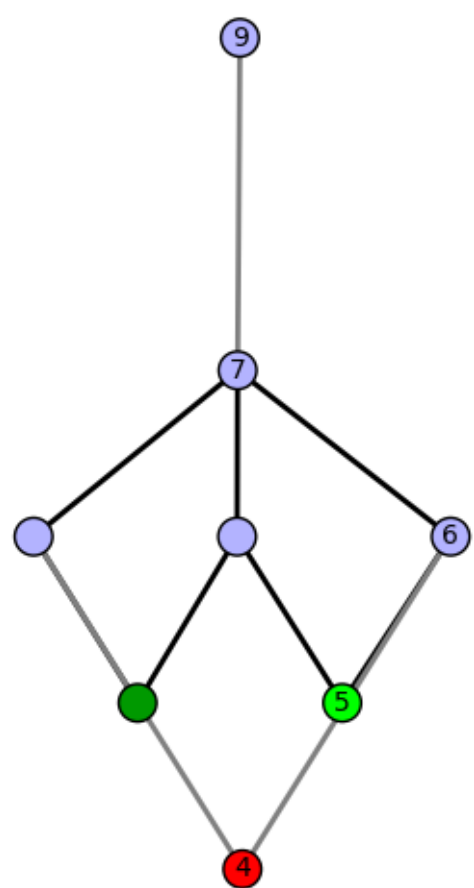


Figure 10: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

7_7

Total optimal pinning sets: 6
Total minimal pinning sets: 6
Total pinning sets: 48
Pinning number: 5
Average optimal gonality: 2.63
Average minimal gonality: 2.63
Average overall gonality: 2.91

Table 11: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	Total
Optimal pinning sets	6	0	0	0	0	6
Minimal (suboptimal) pinning sets	0	0	0	0	0	0
Nonminimal pinning sets	0	17	17	7	1	42
Average gonality	2.63	2.85	2.99	3.07	3.11	

Table 12: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 4, 6, 7}	5	[2, 3, 3, 2, 3]	2.6
B (optimal)	●	{1, 4, 5, 6, 8}	5	[2, 3, 3, 2, 4]	2.8
C (optimal)	●	{1, 4, 5, 6, 7}	5	[2, 3, 3, 2, 3]	2.6
D (optimal)	●	{1, 2, 3, 6, 7}	5	[2, 3, 3, 2, 3]	2.6
E (optimal)	●	{1, 2, 3, 5, 6}	5	[2, 3, 3, 3, 2]	2.6
F (optimal)	●	{1, 2, 4, 5, 6}	5	[2, 3, 3, 3, 2]	2.6

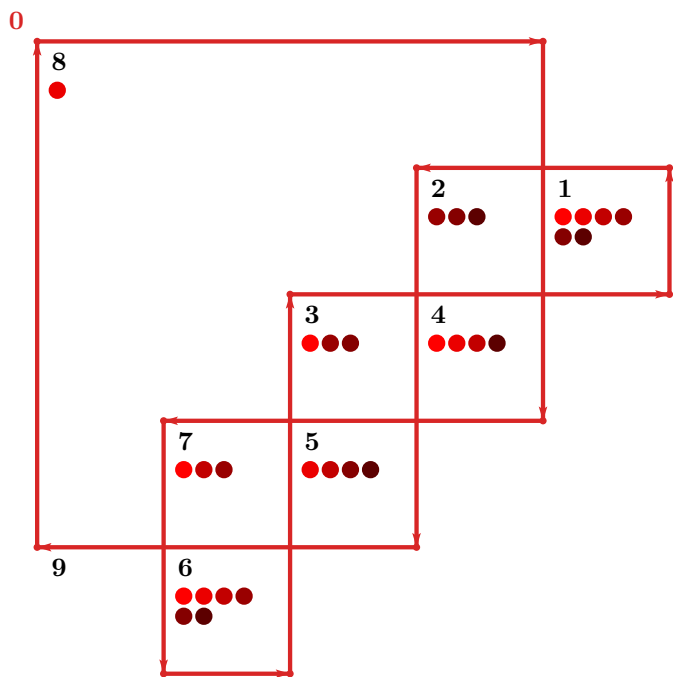


Figure 11: Snappy loop plot.

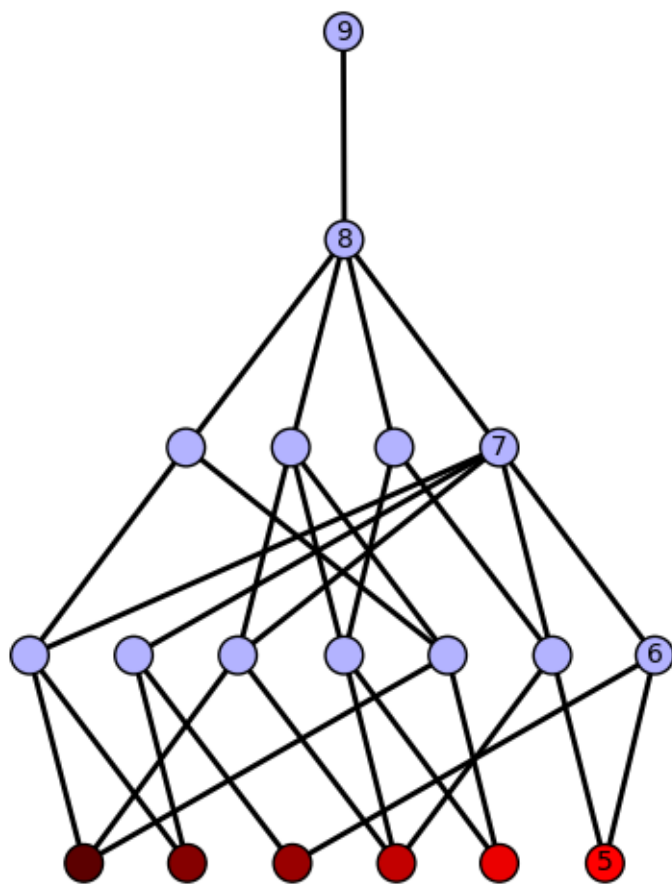


Figure 12: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_2

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 20
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.23
Average overall gonality: 2.78

Table 13: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	Total
Optimal pinning sets	1	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	1
Nonminimal pinning sets	0	4	8	5	1	18
Average gonality	2.17	2.49	2.81	3.07	3.2	

Table 14: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 5, 7, 9}	6	[2, 2, 2, 3, 2, 2]	2.17
a (minimal)	●	{1, 2, 3, 4, 6, 7, 9}	7	[2, 2, 3, 2, 3, 2, 2]	2.29

0

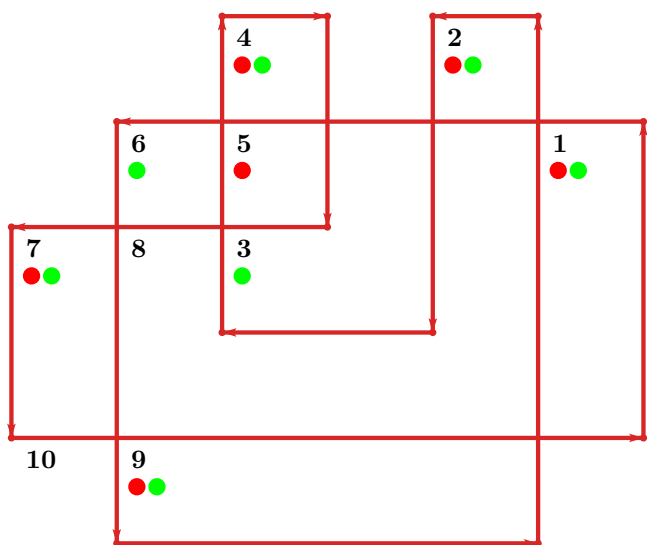


Figure 13: Snappy loop plot.



Figure 14: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
8_7

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 40
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.27
Average overall gonality: 2.84

Table 15: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	1	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	1
Nonminimal pinning sets	0	5	13	13	6	1	38
Average gonality	2.2	2.5	2.76	2.96	3.11	3.2	

Table 16: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 7, 9}	5	[2, 2, 3, 2, 2]	2.2
a (minimal)	●	{1, 2, 5, 6, 7, 9}	6	[2, 2, 3, 3, 2, 2]	2.33

0

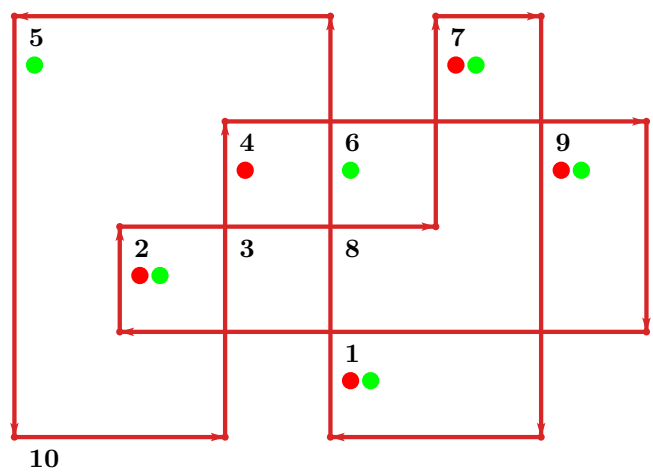


Figure 15: Snappy loop plot.



Figure 16: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_8

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.2
Average overall gonality: 2.83

Table 17: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.2	2.56	2.8	2.98	3.11	3.2	

Table 18: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 5, 9}	5	[2, 2, 3, 2, 2]	2.2
B (optimal)	●	{1, 2, 5, 6, 9}	5	[2, 2, 2, 3, 2]	2.2

0

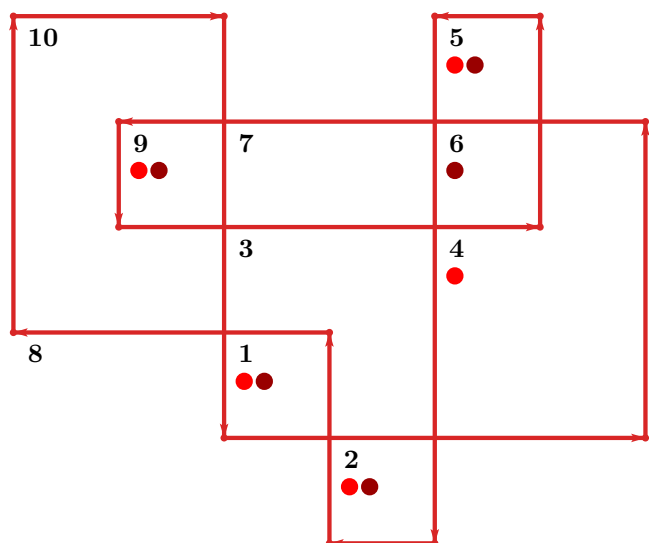


Figure 17: Snappy loop plot.



Figure 18: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_9

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.2
Average overall gonality: 2.83

Table 19: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.2	2.56	2.8	2.98	3.11	3.2	

Table 20: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	<div></div>	{1, 2, 6, 7, 9}	5	[2, 2, 2, 2, 3]	2.2
B (optimal)	<div></div>	{1, 2, 4, 6, 7}	5	[2, 2, 3, 2, 2]	2.2

0

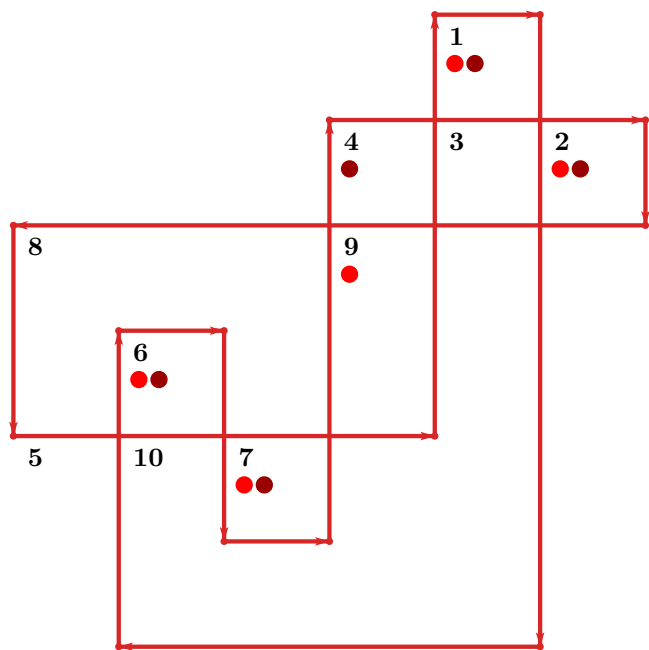


Figure 19: Snappy loop plot.



Figure 20: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_11

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.2
Average overall gonality: 2.83

Table 21: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.2	2.56	2.8	2.98	3.11	3.2	

Table 22: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 5, 7, 9}	5	[2, 2, 3, 2, 2]	2.2
B (optimal)	●	{1, 3, 4, 7, 9}	5	[2, 3, 2, 2, 2]	2.2

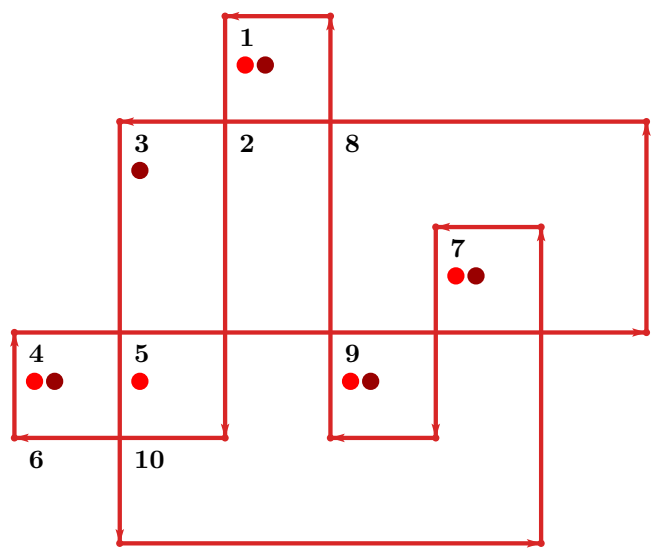


Figure 21: Snappy loop plot.



Figure 22: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_12

Total optimal pinning sets: 4
 Total minimal pinning sets: 4
 Total pinning sets: 60
 Pinning number: 5
 Average optimal gonality: 2.3
 Average minimal gonality: 2.3
 Average overall gonality: 2.84

Table 23: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	4	0	0	0	0	0	4
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	14	20	15	6	1	56
Average gonality	2.3	2.64	2.86	3.0	3.11	3.2	

Table 24: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 5, 9}	5	[2, 2, 3, 2, 2]	2.2
B (optimal)	●	{1, 2, 4, 5, 9}	5	[2, 2, 4, 2, 2]	2.4
C (optimal)	●	{1, 2, 5, 7, 9}	5	[2, 2, 2, 3, 2]	2.2
D (optimal)	●	{1, 2, 5, 6, 9}	5	[2, 2, 2, 4, 2]	2.4

0

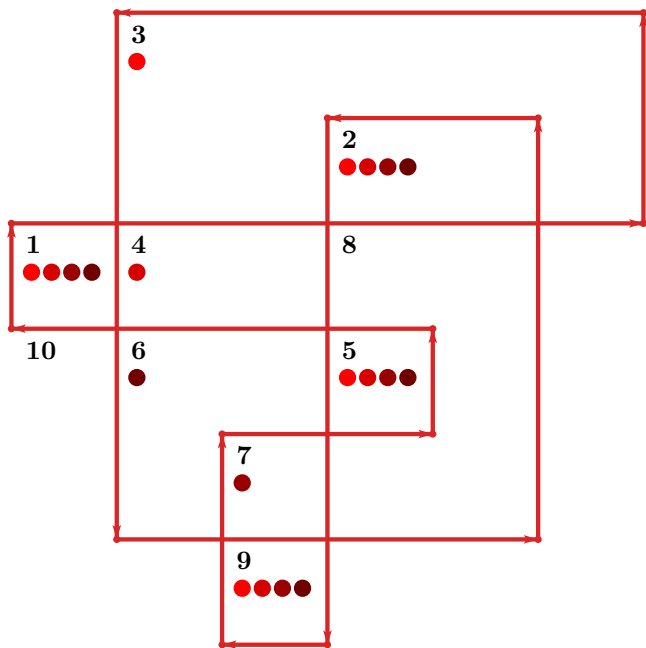


Figure 23: Snappy loop plot.

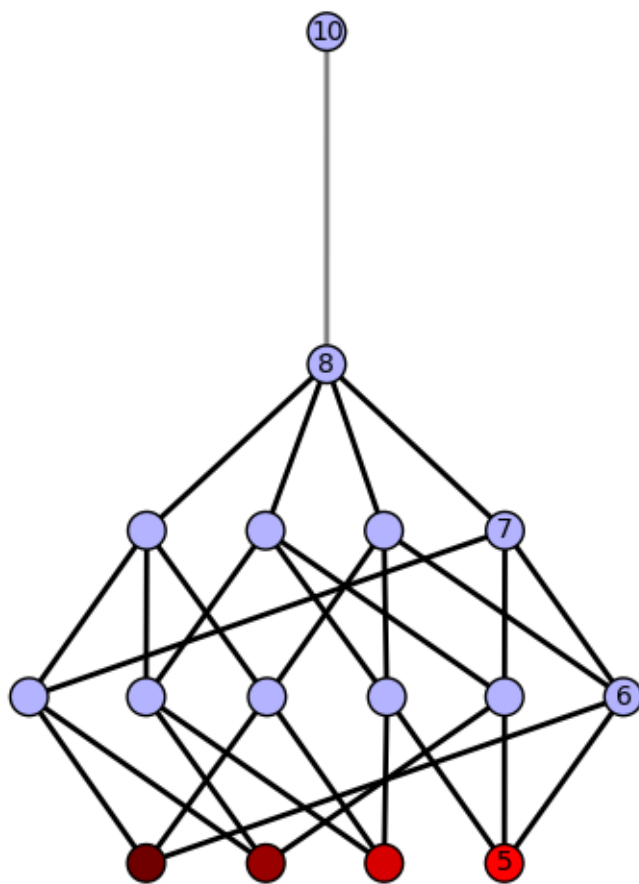


Figure 24: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
8_13

Total optimal pinning sets: 3
Total minimal pinning sets: 3
Total pinning sets: 64
Pinning number: 5
Average optimal gonality: 2.4
Average minimal gonality: 2.4
Average overall gonality: 2.9

Table 25: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	3	0	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	13	22	18	7	1	61
Average gonality	2.4	2.69	2.9	3.04	3.14	3.2	

Table 26: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 5, 7, 9}	5	[3, 2, 3, 2, 2]	2.4
B (optimal)	●	{1, 3, 4, 7, 9}	5	[3, 3, 2, 2, 2]	2.4
C (optimal)	●	{2, 3, 4, 7, 9}	5	[3, 3, 2, 2, 2]	2.4

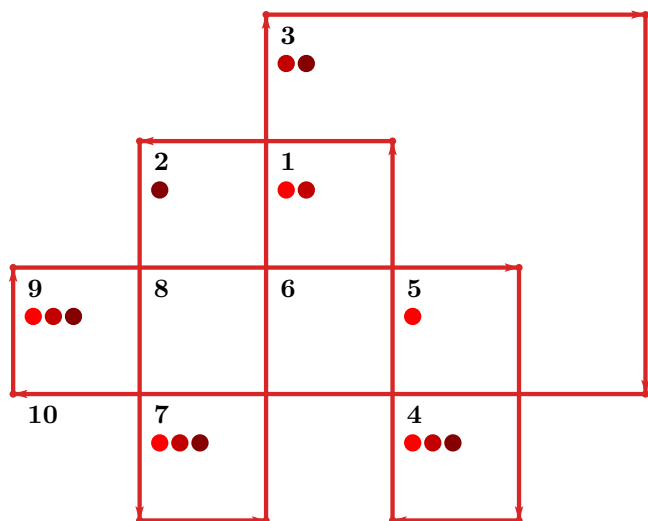


Figure 25: Snappy loop plot.

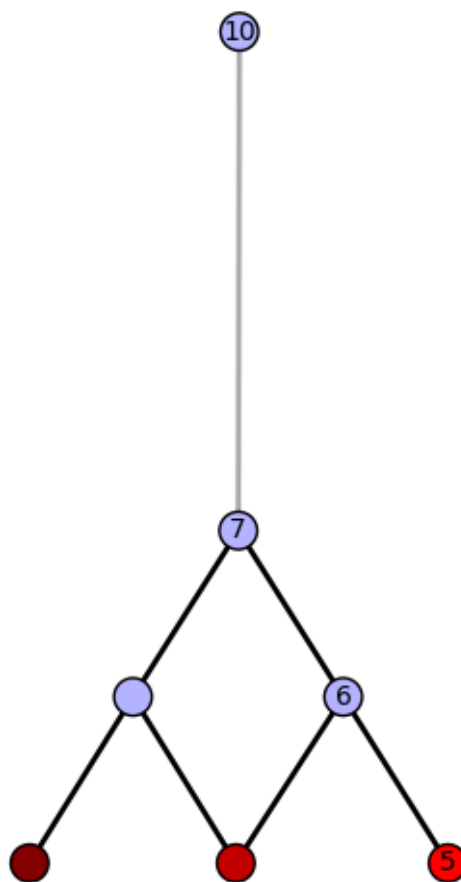


Figure 26: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_14

Total optimal pinning sets: 4
Total minimal pinning sets: 4
Total pinning sets: 72
Pinning number: 5
Average optimal gonality: 2.45
Average minimal gonality: 2.45
Average overall gonality: 2.91

Table 27: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	4	0	0	0	0	0	4
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	16	25	19	7	1	68
Average gonality	2.45	2.73	2.92	3.05	3.14	3.2	

Table 28: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 4, 8}	5	[2, 2, 2, 3, 3]	2.4
B (optimal)	●	{1, 2, 3, 5, 8}	5	[2, 2, 2, 4, 3]	2.6
C (optimal)	●	{1, 2, 3, 7, 8}	5	[2, 2, 2, 3, 3]	2.4
D (optimal)	●	{1, 2, 3, 7, 9}	5	[2, 2, 2, 3, 3]	2.4

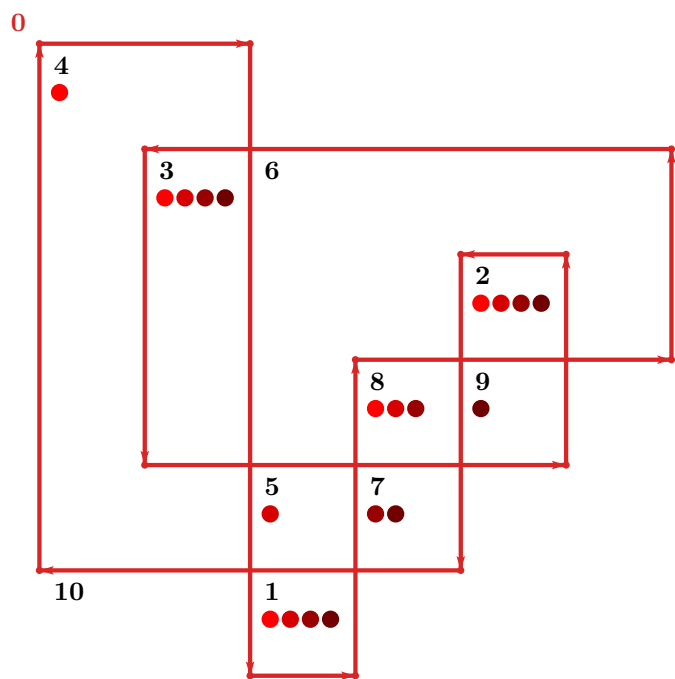


Figure 27: Snappy loop plot.

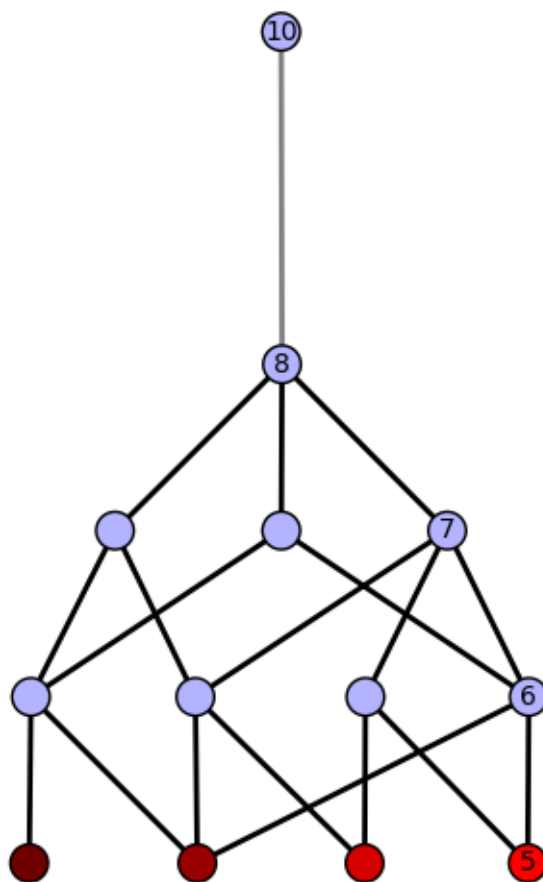


Figure 28: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_15

Total optimal pinning sets: 1
Total minimal pinning sets: 6
Total pinning sets: 104
Pinning number: 4
Average optimal gonality: 2.5
Average minimal gonality: 2.48
Average overall gonality: 2.92

Table 29: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	5	0	0	0	0	0	5
Nonminimal pinning sets	0	6	29	34	21	7	1	98
Average gonality	2.5	2.62	2.83	2.97	3.07	3.14	3.2	

Table 30: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 5, 9}	4	[2, 2, 2, 4]	2.5
a (minimal)	●	{1, 2, 3, 5, 7}	5	[2, 3, 2, 2, 3]	2.4
b (minimal)	●	{1, 2, 3, 5, 8}	5	[2, 3, 2, 2, 4]	2.6
c (minimal)	●	{1, 3, 5, 6, 10}	5	[2, 2, 2, 4, 3]	2.6
d (minimal)	●	{1, 2, 3, 5, 10}	5	[2, 3, 2, 2, 3]	2.4
e (minimal)	●	{1, 3, 5, 7, 10}	5	[2, 2, 2, 3, 3]	2.4

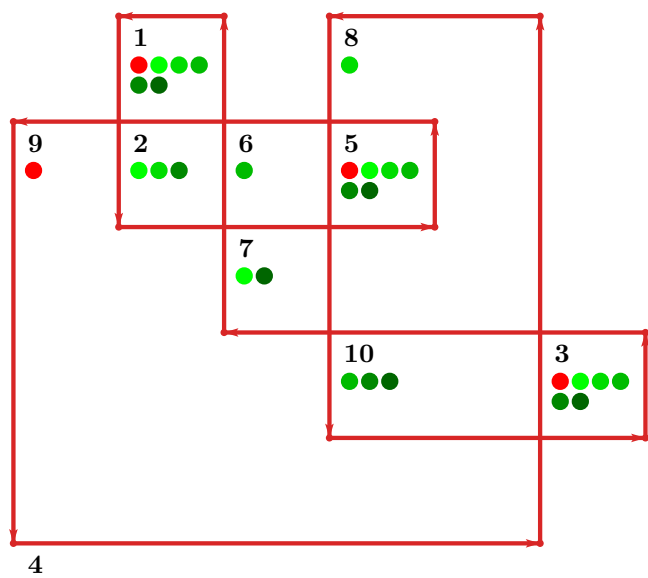


Figure 29: Snappy loop plot.

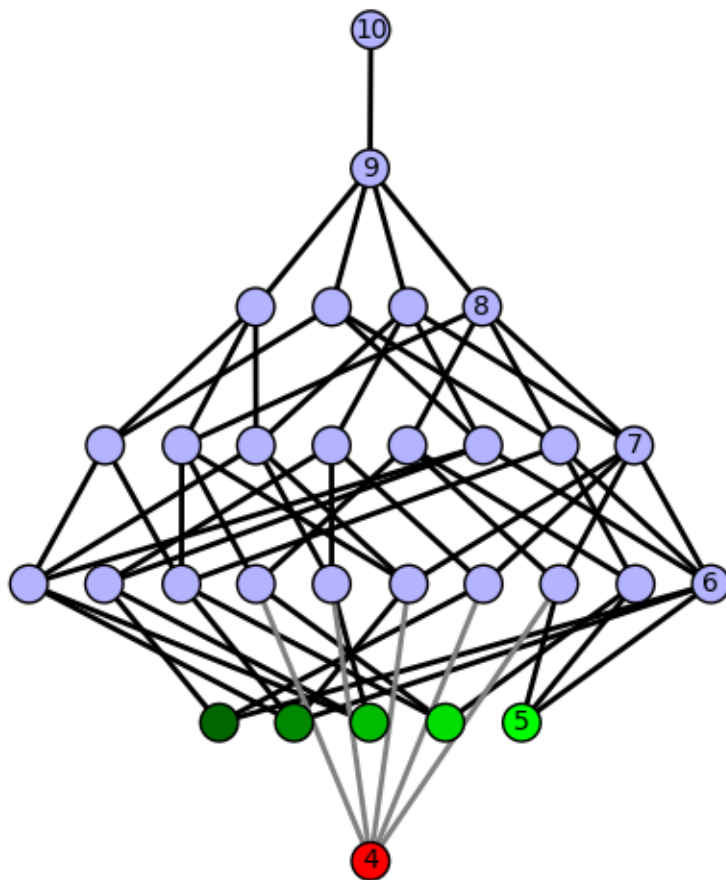


Figure 30: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_16

Total optimal pinning sets: 1
Total minimal pinning sets: 5
Total pinning sets: 114
Pinning number: 4
Average optimal gonality: 2.5
Average minimal gonality: 2.74
Average overall gonality: 3.0

Table 31: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	4	0	0	0	0	0	4
Nonminimal pinning sets	0	6	30	39	25	8	1	109
Average gonality	2.5	2.76	2.91	3.03	3.11	3.17	3.2	

Table 32: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 7}	4	[2, 3, 2, 3]	2.5
a (minimal)	●	{1, 3, 5, 7, 10}	5	[2, 2, 3, 3, 4]	2.8
b (minimal)	●	{1, 3, 5, 8, 9}	5	[2, 2, 3, 3, 3]	2.6
c (minimal)	●	{1, 3, 4, 7, 8}	5	[2, 2, 4, 3, 3]	2.8
d (minimal)	●	{1, 3, 4, 7, 10}	5	[2, 2, 4, 3, 4]	3.0

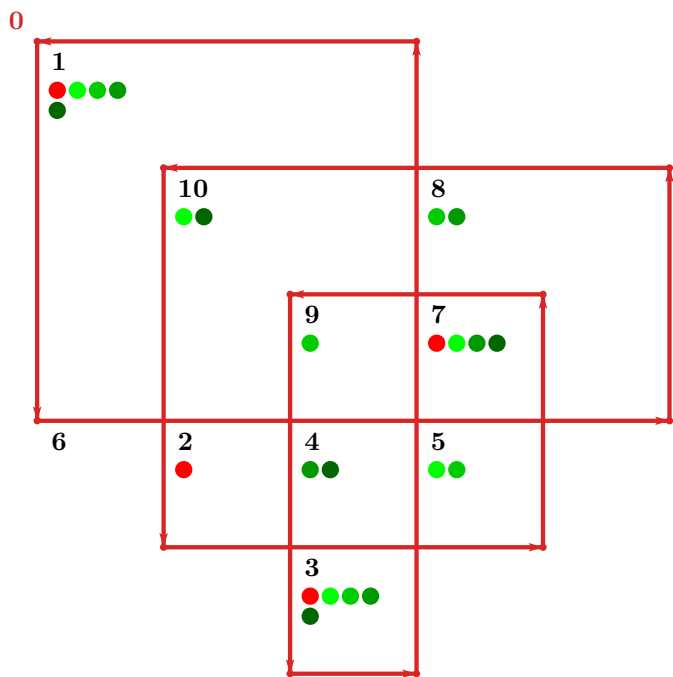


Figure 31: Snappy loop plot.

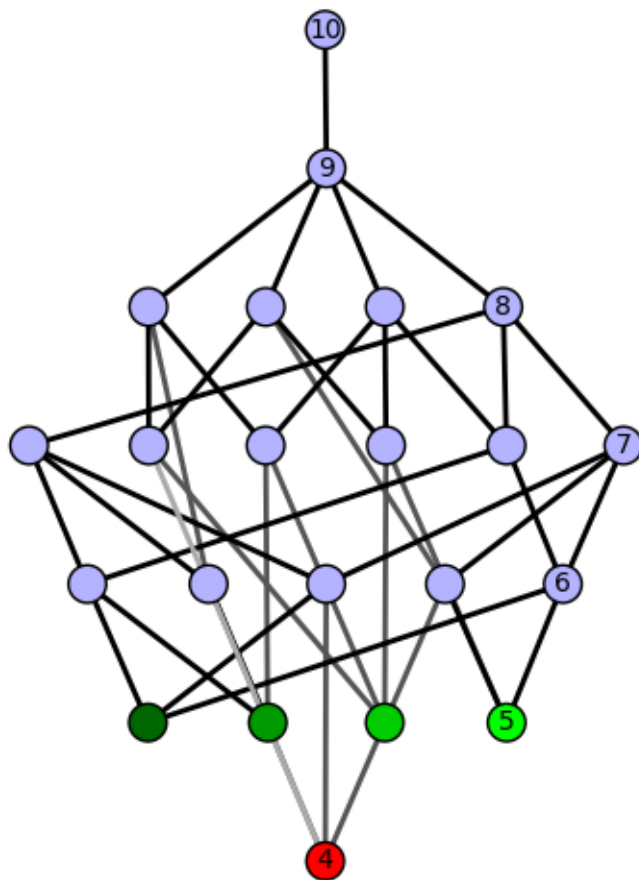


Figure 32: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_17

Total optimal pinning sets: 2
 Total minimal pinning sets: 4
 Total pinning sets: 124
 Pinning number: 4
 Average optimal gonality: 2.5
 Average minimal gonality: 2.65
 Average overall gonality: 2.98

Table 33: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	Total
Optimal pinning sets	2	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	2	0	0	0	0	0	2
Nonminimal pinning sets	0	12	34	40	25	8	1	120
Average gonality	2.5	2.74	2.91	3.03	3.11	3.17	3.2	

Table 34: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 7, 9}	4	[2, 3, 3, 2]	2.5
B (optimal)	●	{1, 3, 6, 9}	4	[2, 3, 3, 2]	2.5
a (minimal)	●	{1, 4, 6, 8, 9}	5	[2, 3, 3, 4, 2]	2.8
b (minimal)	●	{1, 2, 4, 6, 9}	5	[2, 4, 3, 3, 2]	2.8

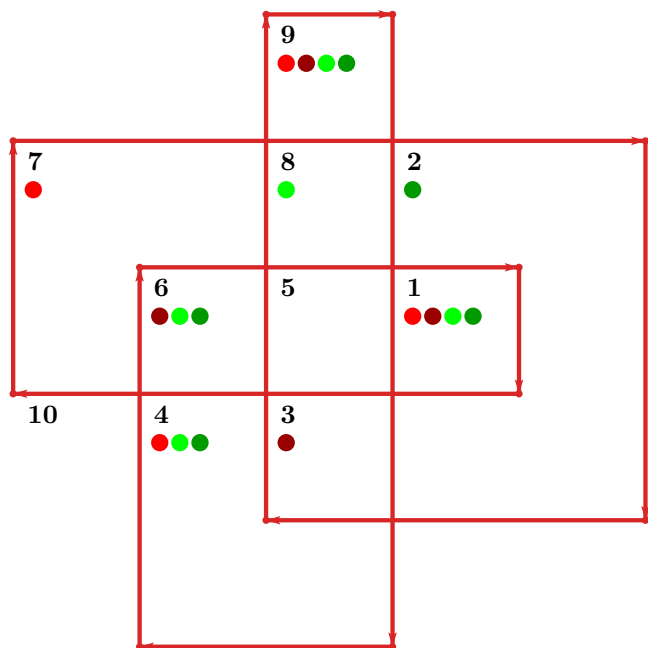


Figure 33: Snappy loop plot.

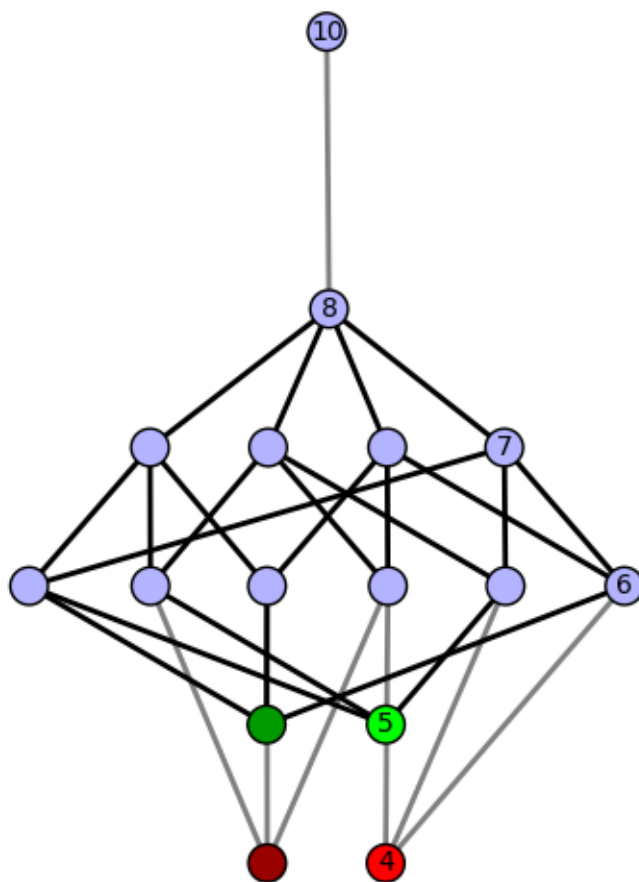


Figure 34: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

8_18

Total optimal pinning sets: 10
Total minimal pinning sets: 10
Total pinning sets: 160
Pinning number: 5
Average optimal gonality: 3.04
Average minimal gonality: 3.04
Average overall gonality: 3.15

Table 35: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	Total
Optimal pinning sets	10	0	0	0	0	0	10
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	42	60	37	10	1	150
Average gonality	3.04	3.11	3.16	3.19	3.2	3.2	

Table 36: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 5, 7, 9}	5	[3, 3, 3, 3, 3]	3.0
B (optimal)	●	{1, 3, 5, 8, 10}	5	[3, 3, 3, 3, 4]	3.2
C (optimal)	●	{1, 3, 4, 7, 8}	5	[3, 3, 3, 3, 3]	3.0
D (optimal)	●	{1, 3, 4, 7, 9}	5	[3, 3, 3, 3, 3]	3.0
E (optimal)	●	{2, 4, 5, 8, 9}	5	[3, 3, 3, 3, 3]	3.0
F (optimal)	●	{2, 4, 6, 7, 9}	5	[3, 3, 4, 3, 3]	3.2
G (optimal)	●	{2, 3, 5, 8, 9}	5	[3, 3, 3, 3, 3]	3.0
H (optimal)	●	{2, 3, 5, 7, 9}	5	[3, 3, 3, 3, 3]	3.0
I (optimal)	●	{1, 2, 4, 7, 8}	5	[3, 3, 3, 3, 3]	3.0
J (optimal)	●	{1, 2, 4, 5, 8}	5	[3, 3, 3, 3, 3]	3.0

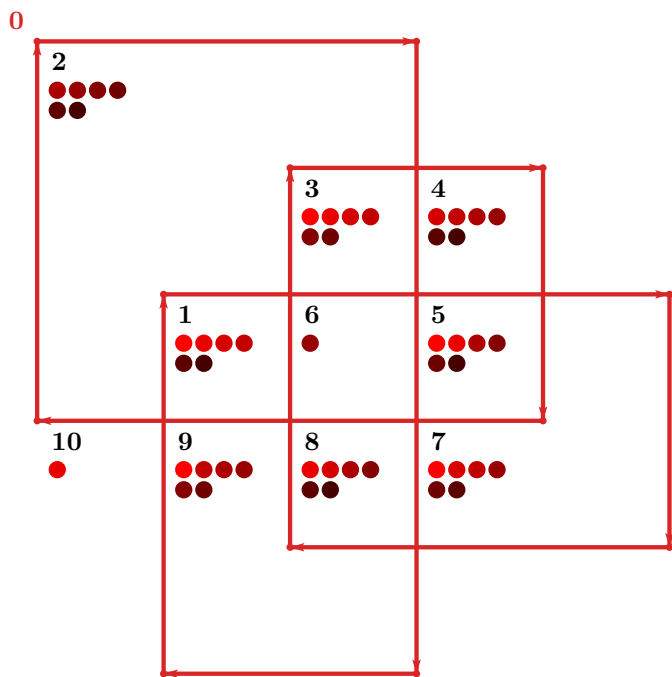


Figure 35: Snappy loop plot.

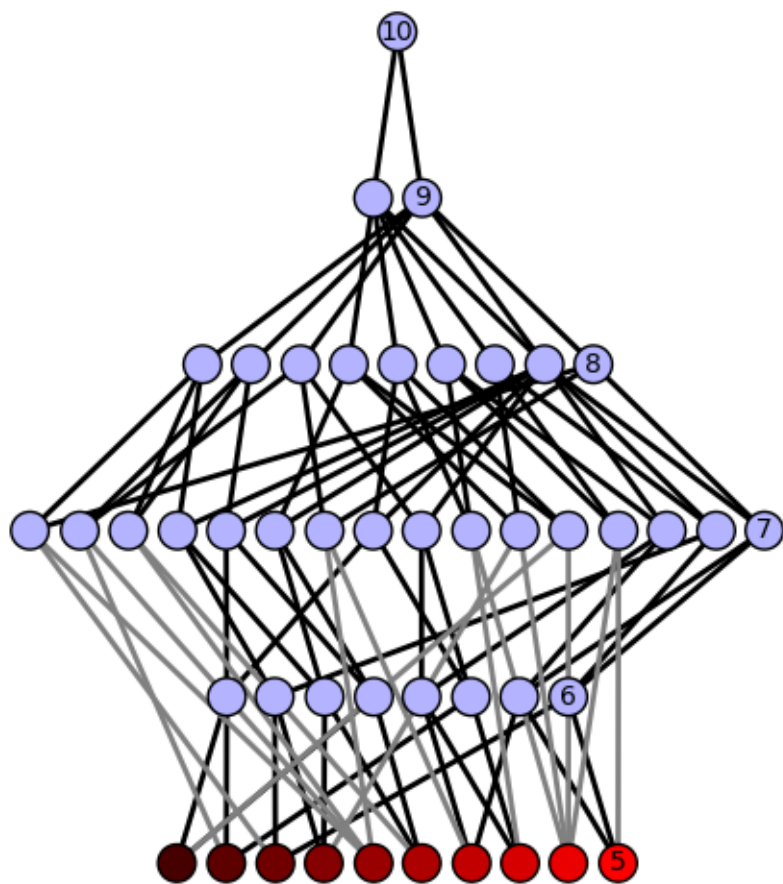


Figure 36: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_8

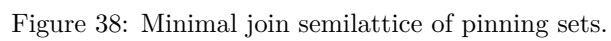
Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.17
Average overall gonality: 2.85

Table 37: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.17	2.54	2.81	3.02	3.17	3.27	

Table 38: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 5, 8, 10}	6	[2, 3, 2, 2, 2, 2]	2.17
B (optimal)	●	{1, 3, 4, 5, 8, 10}	6	[2, 3, 2, 2, 2, 2]	2.17



Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 3
Total minimal pinning sets: 3
Total pinning sets: 56
Pinning number: 6
Average optimal gonality: 2.22
Average minimal gonality: 2.22
Average overall gonality: 2.86

9_11

Table 39: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	Total
Optimal pinning sets	3	0	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	12	19	15	6	1	53
Average gonality	2.22	2.6	2.86	3.04	3.17	3.27	

Table 40: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 7, 8, 10}	6	[2, 2, 2, 3, 2, 2]	2.17
B (optimal)	●	{1, 2, 5, 6, 8, 10}	6	[2, 2, 2, 4, 2, 2]	2.33
C (optimal)	●	{1, 2, 4, 5, 8, 10}	6	[2, 2, 3, 2, 2, 2]	2.17

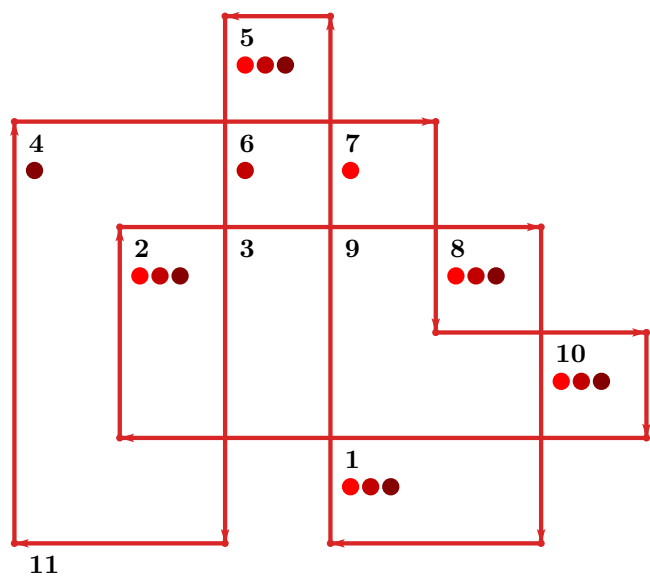


Figure 39: Snappy loop plot.

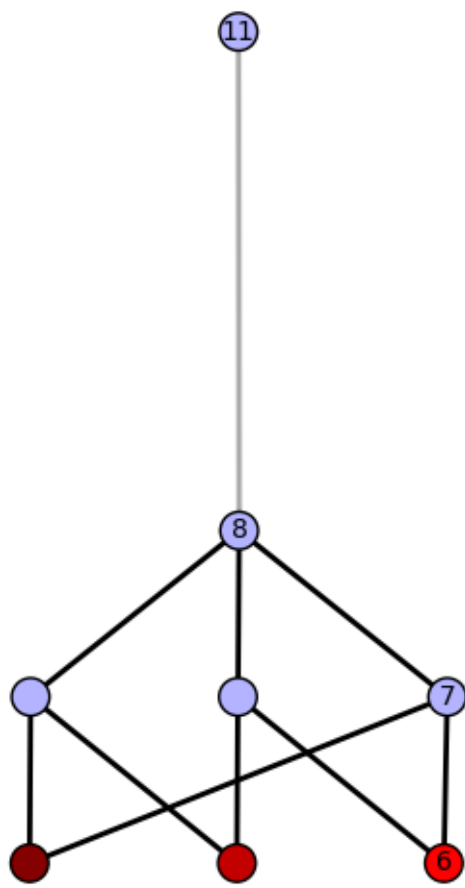


Figure 40: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.17
Average overall gonality: 2.85

9_12

Table 41: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.17	2.54	2.81	3.02	3.17	3.27	

Table 42: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 6, 8, 10}	6	[2, 2, 2, 3, 2, 2]	2.17
B (optimal)	●	{1, 2, 4, 5, 8, 10}	6	[2, 2, 3, 2, 2, 2]	2.17

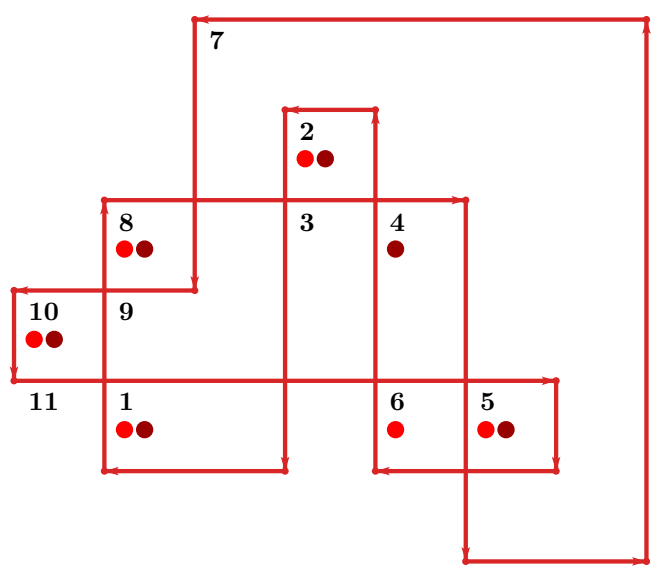


Figure 41: Snappy loop plot.



Figure 42: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 3
Total minimal pinning sets: 3
Total pinning sets: 64
Pinning number: 6
Average optimal gonality: 2.33
Average minimal gonality: 2.33
Average overall gonality: 2.91

9_14

Table 43: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	Total
Optimal pinning sets	3	0	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	13	22	18	7	1	61
Average gonality	2.33	2.66	2.9	3.07	3.2	3.27	

Table 44: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 6, 8, 10}	6	[2, 3, 2, 3, 2, 2]	2.33
B (optimal)	●	{1, 2, 4, 5, 8, 10}	6	[2, 3, 3, 2, 2, 2]	2.33
C (optimal)	●	{1, 3, 4, 5, 8, 10}	6	[2, 3, 3, 2, 2, 2]	2.33

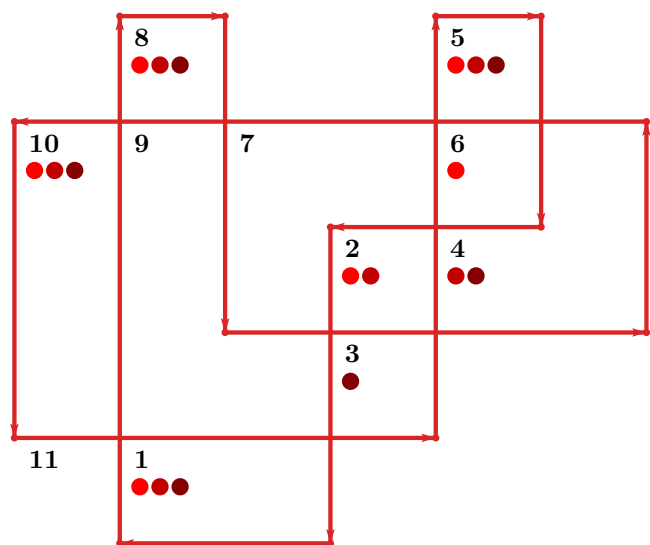


Figure 43: Snappy loop plot.

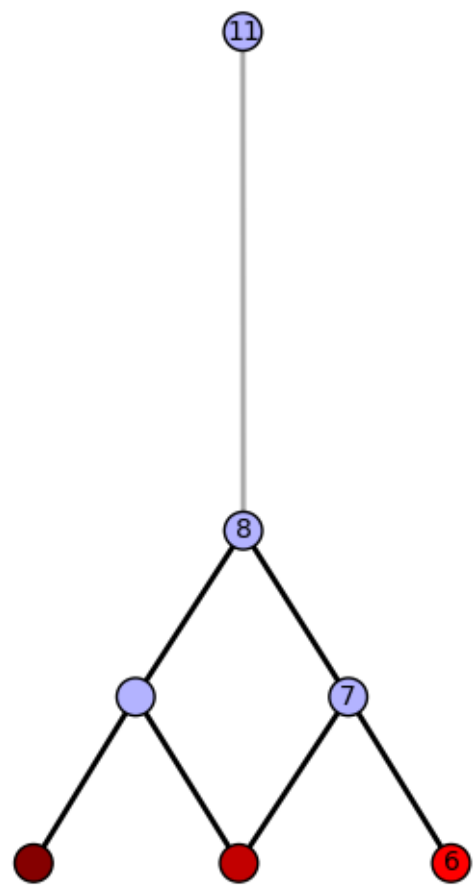


Figure 44: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 3

Total minimal pinning sets: 4

Total pinning sets: 68

Pinning number: 6

Average optimal gonality: 2.33

Average minimal gonality: 2.39

Average overall gonality: 2.92

9_17

Table 45: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	Total
Optimal pinning sets	3	0	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	1
Nonminimal pinning sets	0	13	24	19	7	1	64
Average gonality	2.33	2.65	2.91	3.09	3.2	3.27	

Table 46: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 6, 8, 10}	6	[2, 2, 2, 3, 2, 3]	2.33
B (optimal)	●	{1, 2, 5, 6, 8, 9}	6	[2, 2, 2, 3, 2, 3]	2.33
C (optimal)	●	{1, 2, 4, 5, 8, 9}	6	[2, 2, 3, 2, 2, 3]	2.33
a (minimal)	●	{1, 2, 4, 5, 7, 8, 10}	7	[2, 2, 3, 2, 4, 2, 3]	2.57

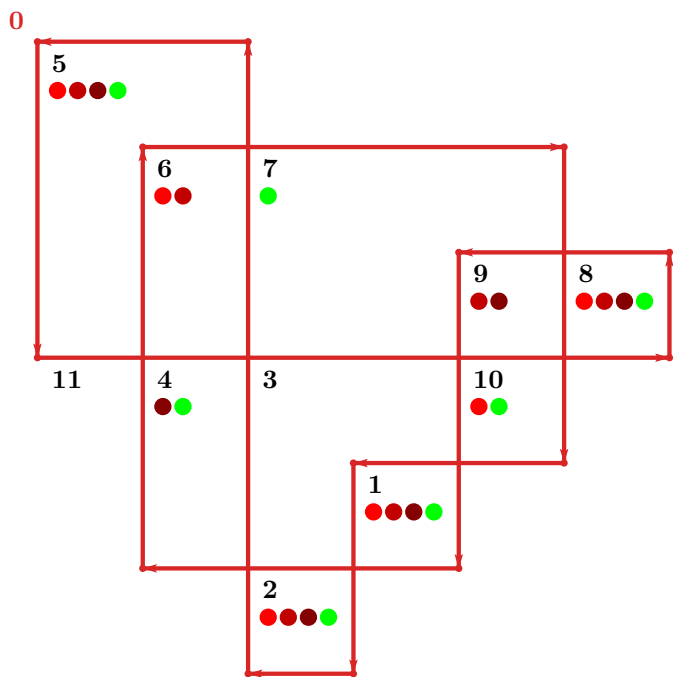


Figure 45: Snappy loop plot.

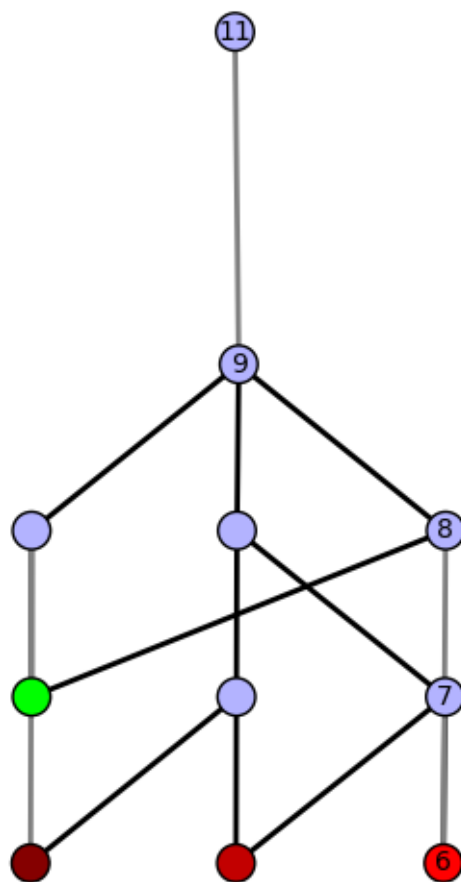


Figure 46: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 80
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.27
Average overall gonality: 2.91

9_19

Table 47: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	0	1
Nonminimal pinning sets	0	6	19	26	19	7	1	78
Average gonality	2.2	2.5	2.74	2.94	3.09	3.2	3.27	

Table 48: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 8, 10}	5	[2, 3, 2, 2, 2]	2.2
a (minimal)	●	{1, 3, 4, 5, 8, 10}	6	[2, 3, 3, 2, 2, 2]	2.33

O

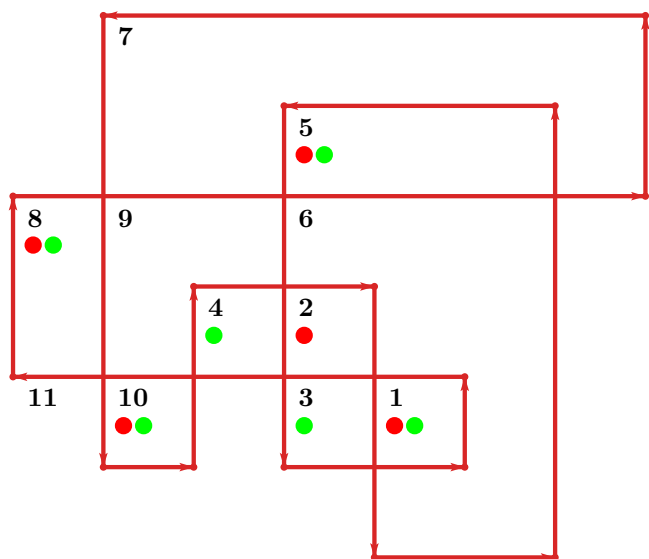


Figure 47: Snappy loop plot.



Figure 48: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 1
Total minimal pinning sets: 3
Total pinning sets: 88
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.34
Average overall gonality: 2.91

9_20

Table 49: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	2	0	0	0	0	0	2
Nonminimal pinning sets	0	6	22	29	20	7	1	85
Average gonality	2.2	2.5	2.76	2.96	3.1	3.2	3.27	

Table 50: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	<div></div>	{1, 3, 4, 7, 8}	5	[2, 3, 2, 2, 2]	2.2
a (minimal)	<div></div>	{1, 2, 4, 7, 8, 10}	6	[2, 3, 2, 2, 2, 3]	2.33
b (minimal)	<div></div>	{1, 2, 4, 5, 7, 8}	6	[2, 3, 2, 4, 2, 2]	2.5

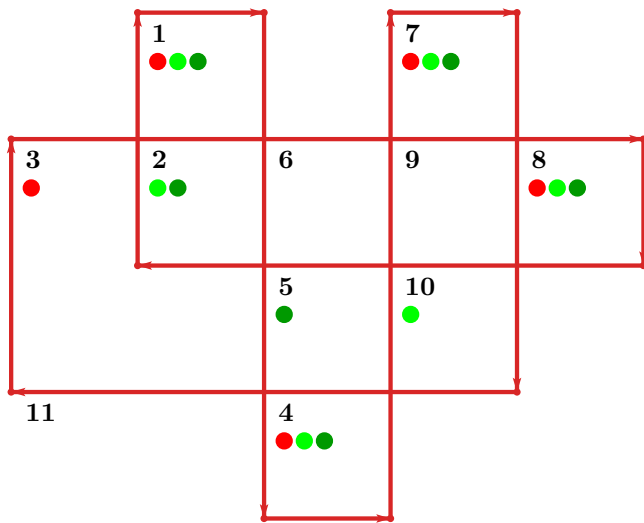


Figure 49: Snappy loop plot.

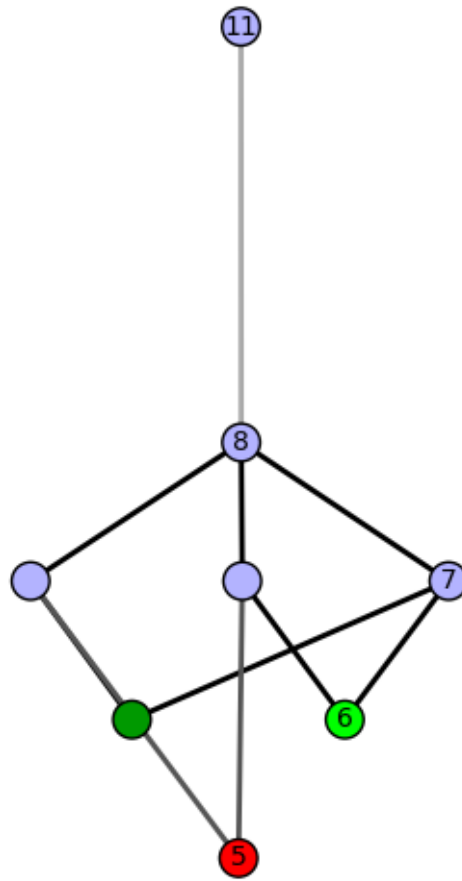


Figure 50: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 1
Total minimal pinning sets: 3
Total pinning sets: 88
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.34
Average overall gonality: 2.91

9_21

Table 51: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	2	0	0	0	0	0	2
Nonminimal pinning sets	0	6	22	29	20	7	1	85
Average gonality	2.2	2.5	2.76	2.96	3.1	3.2	3.27	

Table 52: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 7, 8}	5	[2, 2, 3, 2, 2]	2.2
a (minimal)	●	{1, 2, 3, 7, 8, 10}	6	[2, 2, 3, 2, 2, 3]	2.33
b (minimal)	●	{1, 2, 4, 7, 8, 10}	6	[2, 2, 4, 2, 2, 3]	2.5

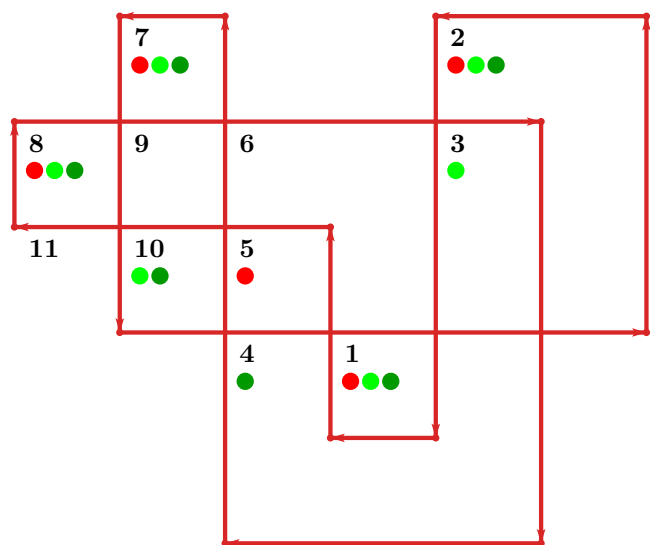


Figure 51: Snappy loop plot.

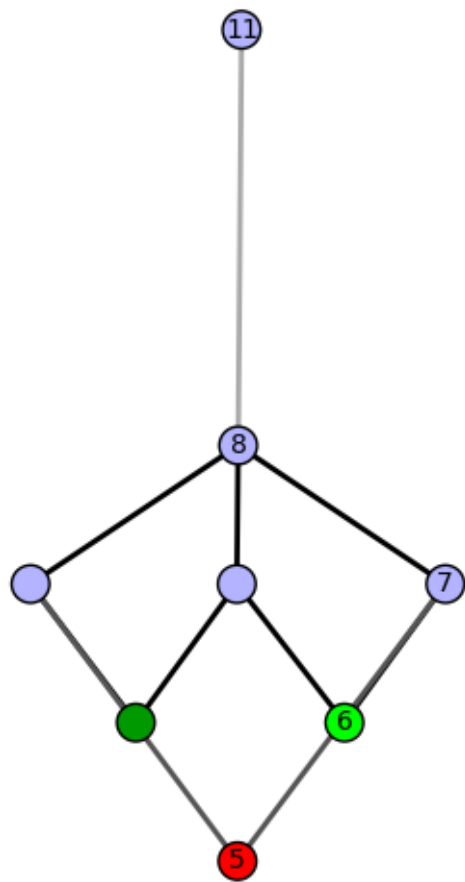


Figure 52: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 2

Total minimal pinning sets: 2

Total pinning sets: 96

Pinning number: 5

Average optimal gonality: 2.2

Average minimal gonality: 2.2

Average overall gonality: 2.9

9_22

Table 53: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	2	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	11	25	30	20	7	1	94
Average gonality	2.2	2.55	2.79	2.97	3.1	3.2	3.27	

Table 54: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 4, 7, 8}	5	[2, 3, 2, 2, 2]	2.2
B (optimal)	●	{1, 2, 4, 7, 8}	5	[2, 3, 2, 2, 2]	2.2

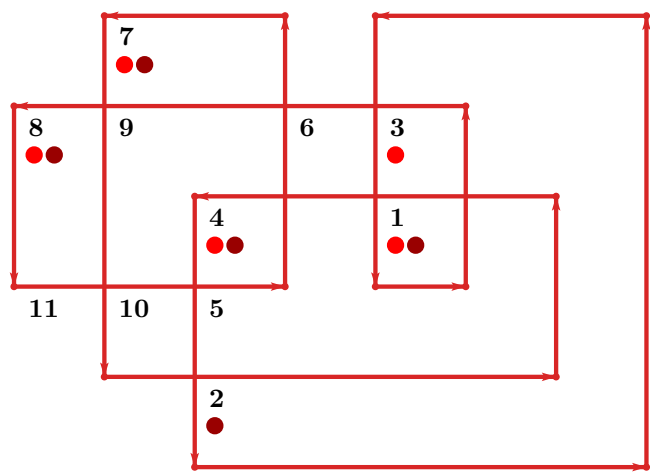


Figure 53: Snappy loop plot.



Figure 54: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_23

Total optimal pinning sets: 1
Total minimal pinning sets: 5
Total pinning sets: 100
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.44
Average overall gonality: 2.92

Table 55: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	4	0	0	0	0	0	4
Nonminimal pinning sets	0	6	27	33	21	7	1	95
Average gonality	2.2	2.52	2.79	2.98	3.11	3.2	3.27	

Table 56: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 8, 10}	5	[2, 2, 2, 3, 2]	2.2
a (minimal)	●	{1, 2, 4, 5, 9, 10}	6	[2, 2, 2, 3, 4, 2]	2.5
b (minimal)	●	{1, 2, 4, 6, 9, 10}	6	[2, 2, 2, 4, 4, 2]	2.67
c (minimal)	●	{1, 2, 3, 4, 5, 10}	6	[2, 2, 3, 2, 3, 2]	2.33
d (minimal)	●	{1, 2, 3, 4, 6, 10}	6	[2, 2, 3, 2, 4, 2]	2.5

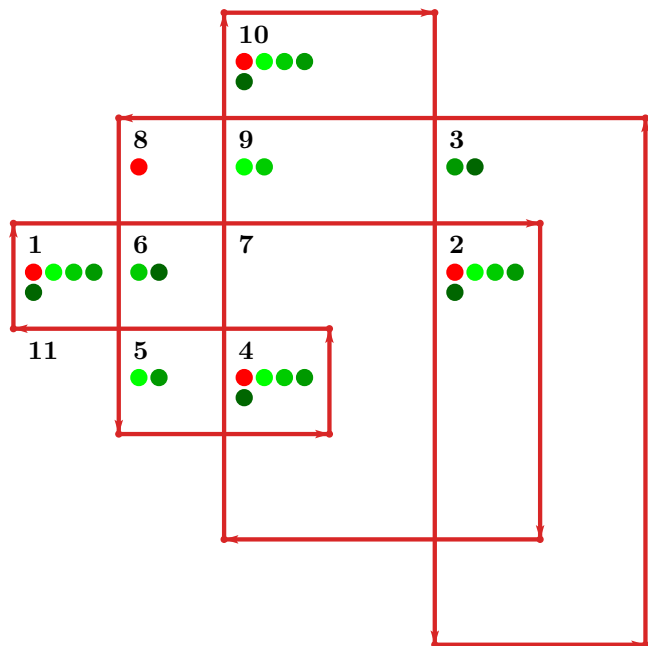


Figure 55: Snappy loop plot.

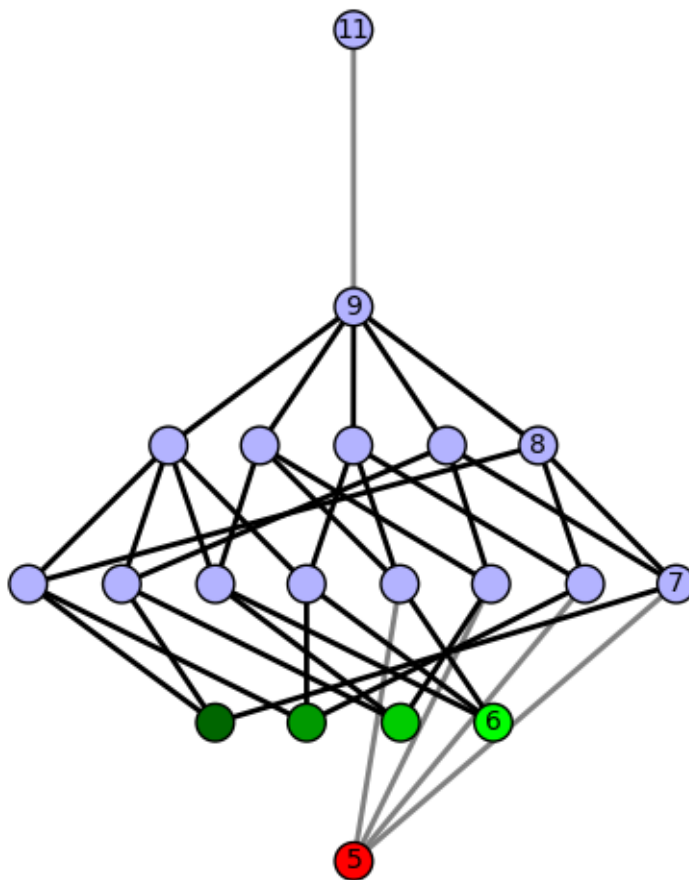


Figure 56: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 96
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.2
Average overall gonality: 2.9

9_24

Table 57: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	2	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	11	25	30	20	7	1	94
Average gonality	2.2	2.55	2.79	2.97	3.1	3.2	3.27	

Table 58: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	<div></div>	{1, 3, 5, 8, 10}	5	[2, 2, 3, 2, 2]	2.2
B (optimal)	<div></div>	{1, 3, 6, 8, 10}	5	[2, 2, 3, 2, 2]	2.2

0

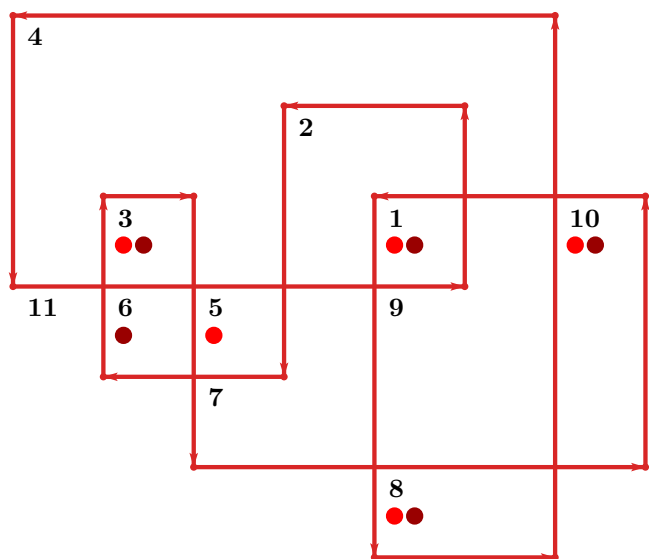


Figure 57: Snappy loop plot.



Figure 58: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_25

Total optimal pinning sets: 5
Total minimal pinning sets: 5
Total pinning sets: 124
Pinning number: 5
Average optimal gonality: 2.32
Average minimal gonality: 2.32
Average overall gonality: 2.91

Table 59: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	5	0	0	0	0	0	0	5
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	20	35	35	21	7	1	119
Average gonality	2.32	2.65	2.86	3.0	3.11	3.2	3.27	

Table 60: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 5, 8}	5	[2, 2, 3, 2, 2]	2.2
B (optimal)	●	{1, 2, 5, 8, 9}	5	[2, 2, 2, 2, 4]	2.4
C (optimal)	●	{1, 2, 5, 8, 10}	5	[2, 2, 2, 2, 3]	2.2
D (optimal)	●	{1, 2, 5, 6, 8}	5	[2, 2, 2, 3, 2]	2.2
E (optimal)	●	{1, 2, 4, 5, 8}	5	[2, 2, 5, 2, 2]	2.6

[illegible]

Figure 60: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 1
Total minimal pinning sets: 4
Total pinning sets: 104
Pinning number: 5
Average optimal gonality: 2.4
Average minimal gonality: 2.48
Average overall gonality: 2.97

9_26

Table 61: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	3	0	0	0	0	0	3
Nonminimal pinning sets	0	6	26	35	24	8	1	100
Average gonality	2.4	2.61	2.84	3.01	3.14	3.23	3.27	

Table 62: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{2, 3, 6, 8, 11}	5	[2, 2, 2, 3, 3]	2.4
a (minimal)	●	{2, 3, 6, 7, 10, 11}	6	[2, 2, 2, 3, 3, 3]	2.5
b (minimal)	●	{1, 2, 3, 6, 7, 10}	6	[3, 2, 2, 2, 3, 3]	2.5
c (minimal)	●	{1, 2, 3, 6, 8, 10}	6	[3, 2, 2, 2, 3, 3]	2.5

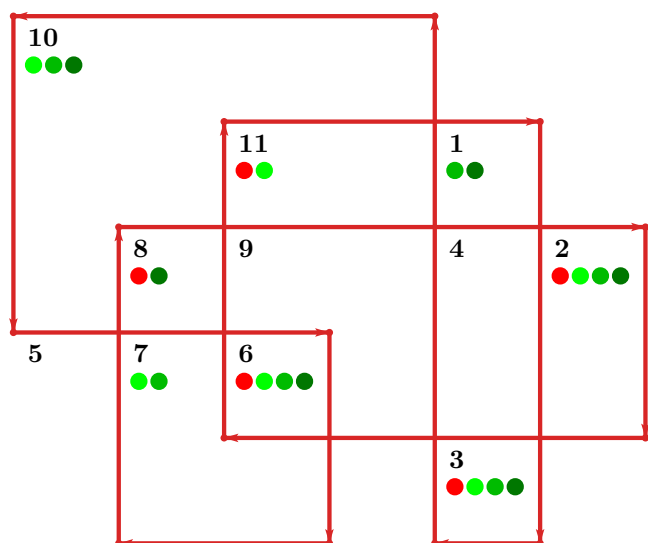


Figure 61: Snappy loop plot.

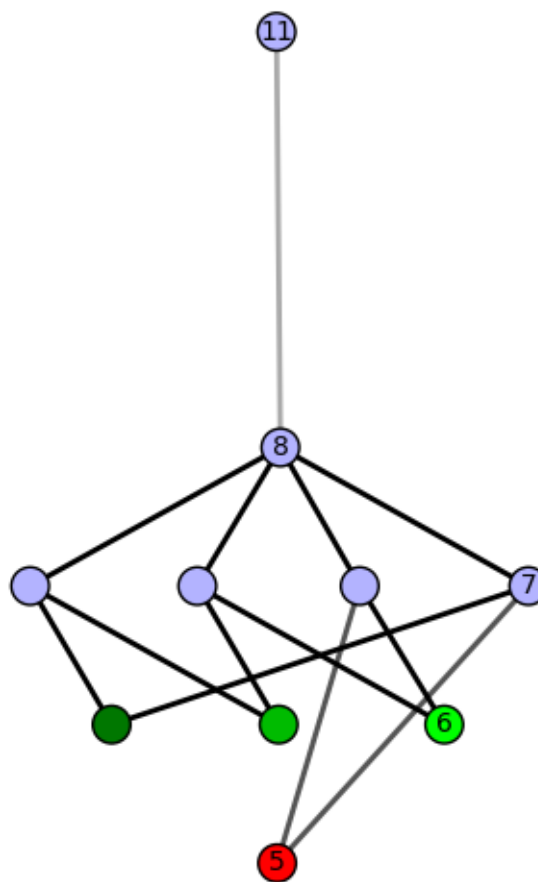


Figure 62: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 1
 Total minimal pinning sets: 5
 Total pinning sets: 112
 Pinning number: 5
 Average optimal gonality: 2.4
 Average minimal gonality: 2.51
 Average overall gonality: 2.98

9_27

Table 63: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	4	0	0	0	0	0	4
Nonminimal pinning sets	0	6	29	38	25	8	1	107
Average gonality	2.4	2.62	2.85	3.02	3.15	3.23	3.27	

Table 64: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 5, 8, 10}	5	[2, 3, 2, 2, 3]	2.4
a (minimal)	●	{1, 2, 5, 6, 8, 9}	6	[2, 3, 2, 3, 2, 3]	2.5
b (minimal)	●	{1, 2, 5, 6, 8, 10}	6	[2, 3, 2, 3, 2, 3]	2.5
c (minimal)	●	{1, 2, 4, 5, 8, 9}	6	[2, 3, 3, 2, 2, 3]	2.5
d (minimal)	●	{1, 3, 4, 5, 8, 9}	6	[2, 4, 3, 2, 2, 3]	2.67

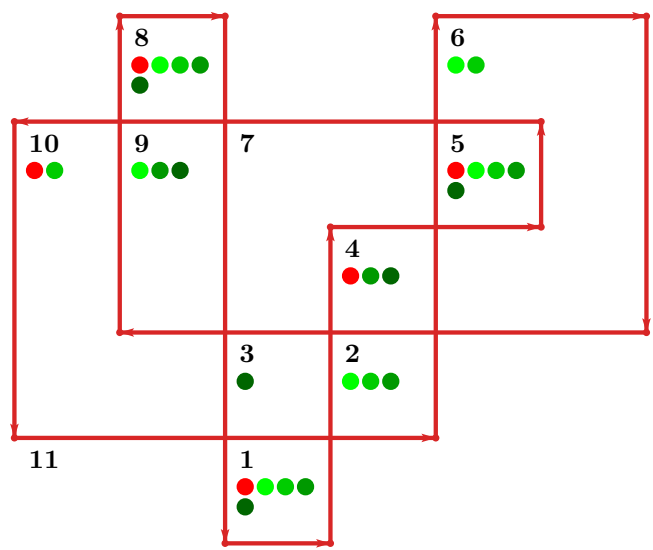


Figure 63: Snappy loop plot.

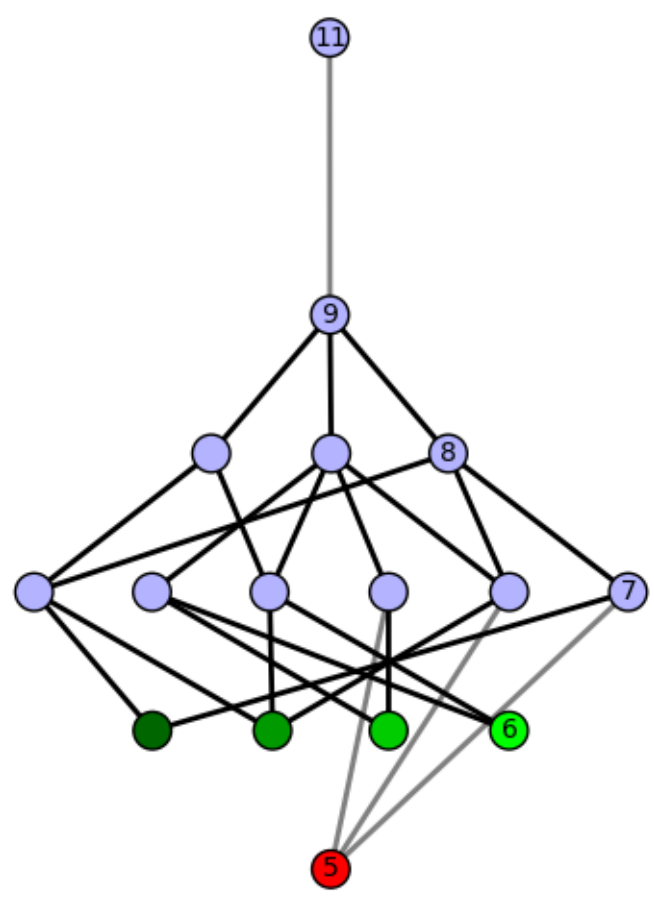


Figure 64: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 4

Total minimal pinning sets: 4

Total pinning sets: 144

Pinning number: 5

Average optimal gonality: 2.4

Average minimal gonality: 2.4

Average overall gonality: 2.97

9_28

Table 65: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	4	0	0	0	0	0	0	4
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	20	41	44	26	8	1	140
Average gonality	2.4	2.7	2.91	3.05	3.15	3.23	3.27	

Table 66: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 5, 8}	5	[2, 2, 2, 3, 3]	2.4
B (optimal)	●	{1, 2, 4, 6, 8}	5	[2, 2, 2, 3, 3]	2.4
C (optimal)	●	{1, 2, 4, 5, 10}	5	[2, 2, 2, 3, 3]	2.4
D (optimal)	●	{1, 2, 4, 6, 10}	5	[2, 2, 2, 3, 3]	2.4

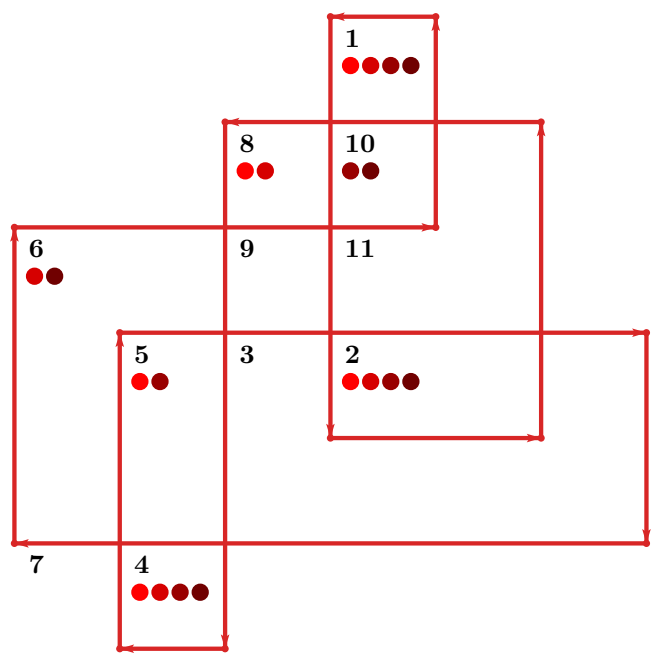


Figure 65: Snappy loop plot.

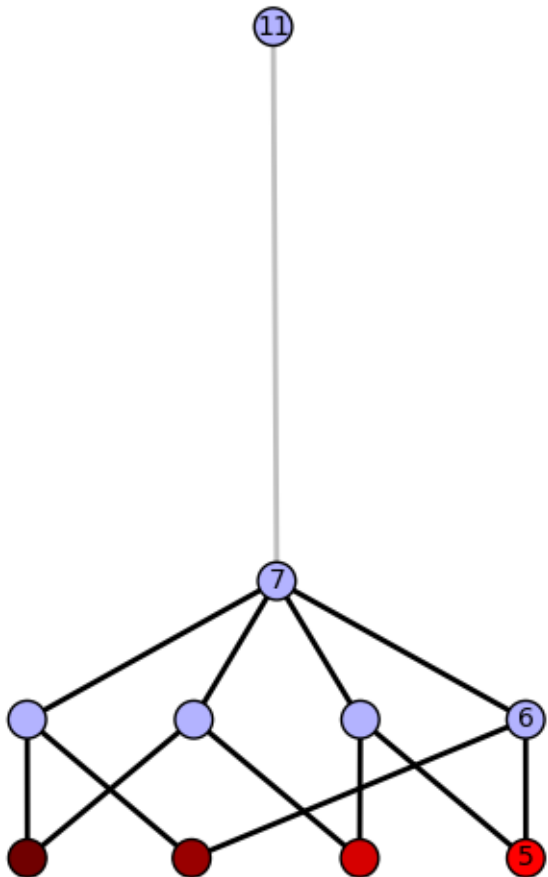


Figure 66: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 6
 Total minimal pinning sets: 8
 Total pinning sets: 188
 Pinning number: 5
 Average optimal gonality: 2.53
 Average minimal gonality: 2.65
 Average overall gonality: 3.0

9_29

Table 67: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	6	0	0	0	0	0	0	6
Minimal (suboptimal) pinning sets	0	2	0	0	0	0	0	2
Nonminimal pinning sets	0	30	59	54	28	8	1	180
Average gonality	2.53	2.79	2.97	3.09	3.17	3.23	3.27	

Table 68: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 7, 8}	5	[2, 3, 2, 3, 2]	2.4
B (optimal)	●	{1, 2, 5, 8, 10}	5	[2, 3, 2, 2, 3]	2.4
C (optimal)	●	{1, 3, 5, 7, 8}	5	[2, 4, 2, 3, 2]	2.6
D (optimal)	●	{1, 3, 5, 8, 9}	5	[2, 4, 2, 2, 4]	2.8
E (optimal)	●	{1, 4, 5, 8, 10}	5	[2, 3, 2, 2, 3]	2.4
F (optimal)	●	{1, 4, 5, 8, 9}	5	[2, 3, 2, 2, 4]	2.6
a (minimal)	●	{1, 2, 5, 8, 9, 11}	6	[2, 3, 2, 2, 4, 5]	3.0
b (minimal)	●	{1, 3, 5, 6, 8, 10}	6	[2, 4, 2, 5, 2, 3]	3.0

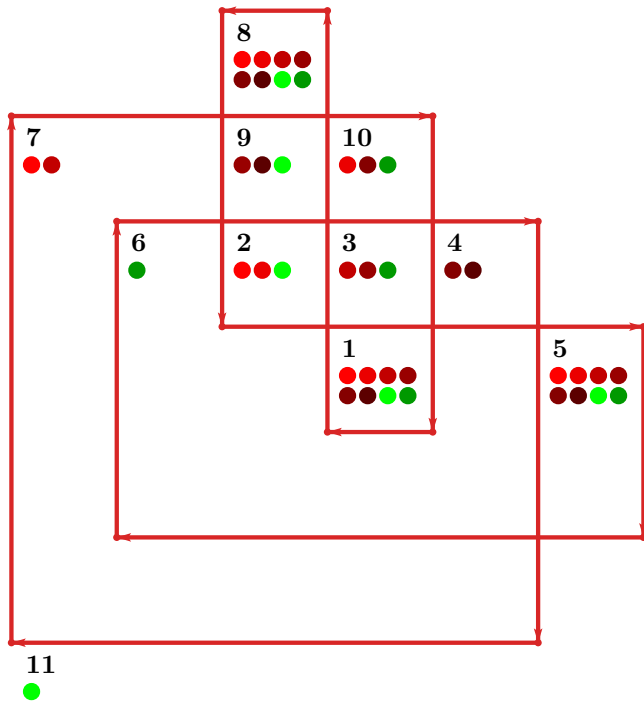


Figure 67: Snappy loop plot.

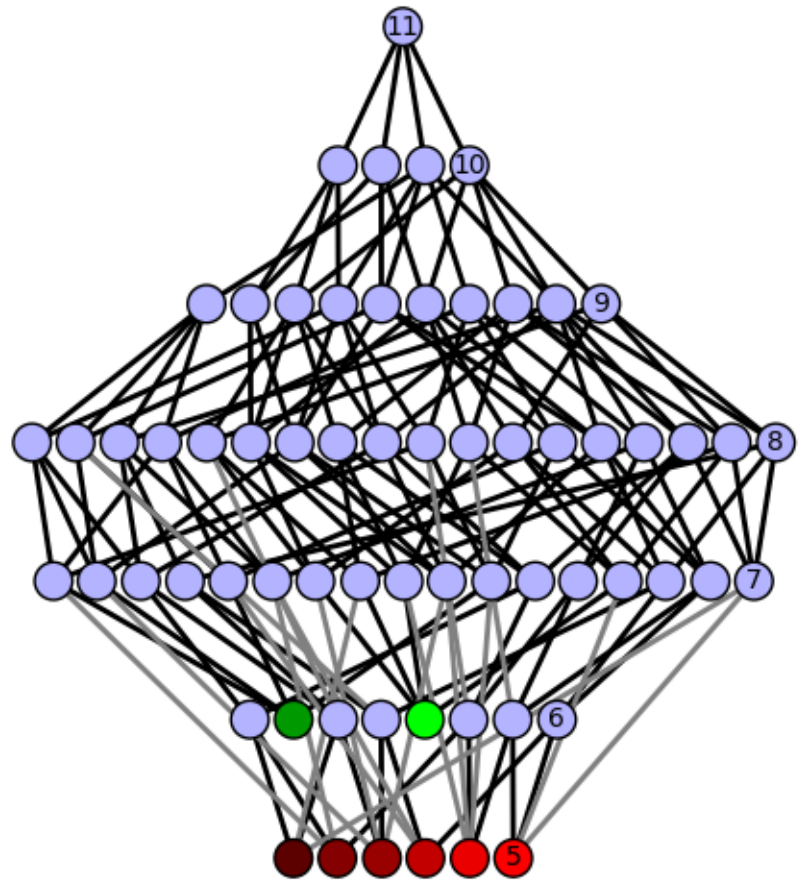


Figure 68: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 192
Pinning number: 4
Average optimal gonality: 2.25
Average minimal gonality: 2.25
Average overall gonality: 2.97

9_30

Table 69: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	2	0	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	13	36	55	50	27	8	1	190
Average gonality	2.25	2.58	2.81	2.96	3.08	3.16	3.23	3.27	

Table 70: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 7, 10}	4	[2, 2, 3, 2]	2.25
B (optimal)	●	{1, 4, 6, 10}	4	[2, 2, 3, 2]	2.25

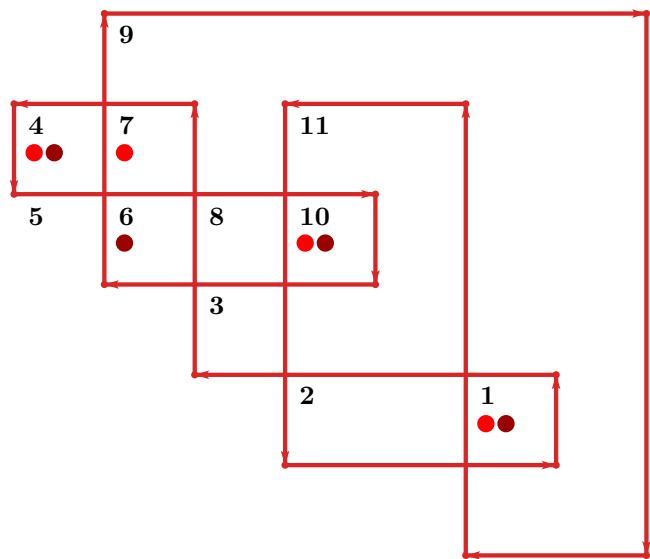


Figure 69: Snappy loop plot.



Figure 70: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_31

Total optimal pinning sets: 1
Total minimal pinning sets: 7
Total pinning sets: 136
Pinning number: 5
Average optimal gonality: 2.6
Average minimal gonality: 2.66
Average overall gonality: 3.04

Table 71: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	6	0	0	0	0	0	6
Nonminimal pinning sets	0	6	36	47	30	9	1	129
Average gonality	2.6	2.74	2.93	3.08	3.19	3.24	3.27	

Table 72: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 5, 8, 10}	5	[2, 3, 3, 3, 2]	2.6
a (minimal)	●	{1, 2, 4, 5, 8, 10}	6	[2, 3, 3, 3, 3, 2]	2.67
b (minimal)	●	{1, 2, 4, 6, 8, 10}	6	[2, 3, 3, 3, 3, 2]	2.67
c (minimal)	●	{1, 3, 4, 6, 8, 10}	6	[2, 3, 3, 3, 3, 2]	2.67
d (minimal)	●	{1, 2, 4, 6, 9, 10}	6	[2, 3, 3, 3, 3, 2]	2.67
e (minimal)	●	{1, 3, 4, 6, 9, 10}	6	[2, 3, 3, 3, 3, 2]	2.67
f (minimal)	●	{1, 3, 5, 6, 9, 10}	6	[2, 3, 3, 3, 3, 2]	2.67

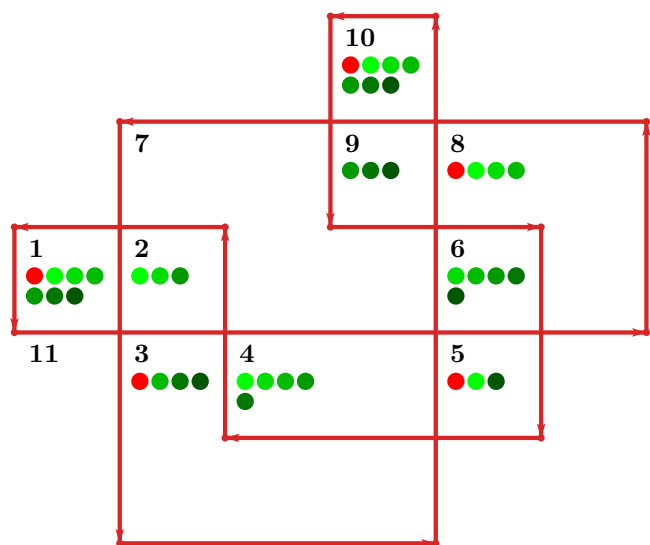


Figure 71: Snappy loop plot.

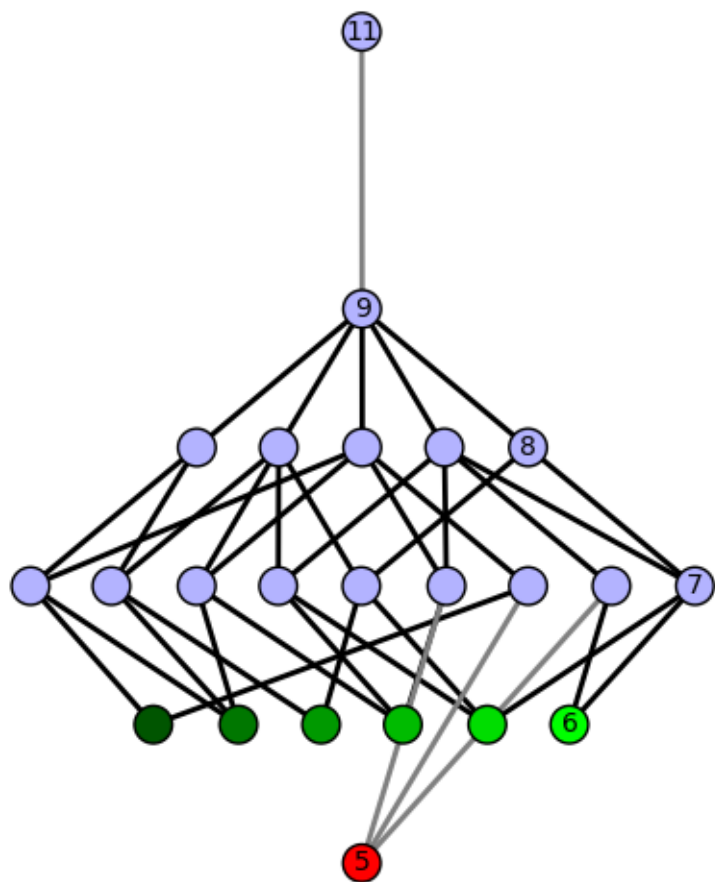


Figure 72: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_32

Total optimal pinning sets: 3
Total minimal pinning sets: 4
Total pinning sets: 256
Pinning number: 4
Average optimal gonality: 2.58
Average minimal gonality: 2.59
Average overall gonality: 3.06

Table 73: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	3	0	0	0	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	0	0	1
Nonminimal pinning sets	0	18	51	75	65	33	9	1	252
Average gonality	2.58	2.8	2.95	3.06	3.14	3.2	3.24	3.27	

Table 74: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 8, 11}	4	[2, 3, 2, 3]	2.5
B (optimal)	●	{1, 2, 4, 8}	4	[2, 3, 3, 2]	2.5
C (optimal)	●	{1, 4, 7, 8}	4	[2, 3, 4, 2]	2.75
a (minimal)	●	{1, 2, 5, 6, 8}	5	[2, 3, 3, 3, 2]	2.6

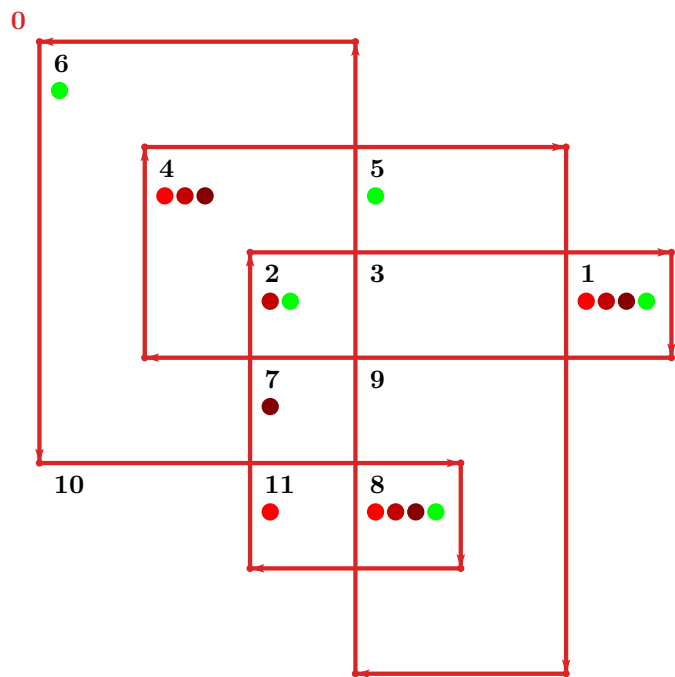


Figure 73: Snappy loop plot.

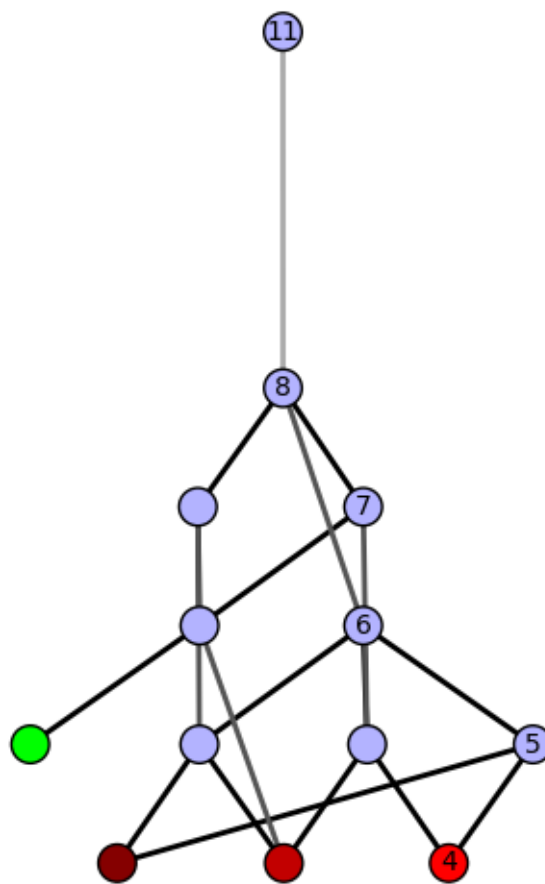


Figure 74: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_33

Total optimal pinning sets: 4
 Total minimal pinning sets: 6
 Total pinning sets: 288
 Pinning number: 4
 Average optimal gonality: 2.62
 Average minimal gonality: 2.65
 Average overall gonality: 3.06

Table 75: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	4	0	0	0	0	0	0	0	4
Minimal (suboptimal) pinning sets	0	2	0	0	0	0	0	0	2
Nonminimal pinning sets	0	22	61	85	70	34	9	1	282
Average gonality	2.62	2.82	2.96	3.07	3.14	3.2	3.24	3.27	

Table 76: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 5, 10}	4	[2, 3, 3, 2]	2.5
B (optimal)	●	{1, 2, 5, 10}	4	[2, 4, 3, 2]	2.75
C (optimal)	●	{1, 5, 9, 10}	4	[2, 3, 4, 2]	2.75
D (optimal)	●	{1, 5, 8, 10}	4	[2, 3, 3, 2]	2.5
a (minimal)	●	{1, 3, 4, 8, 10}	5	[2, 3, 3, 3, 2]	2.6
b (minimal)	●	{1, 3, 4, 7, 10}	5	[2, 3, 3, 4, 2]	2.8

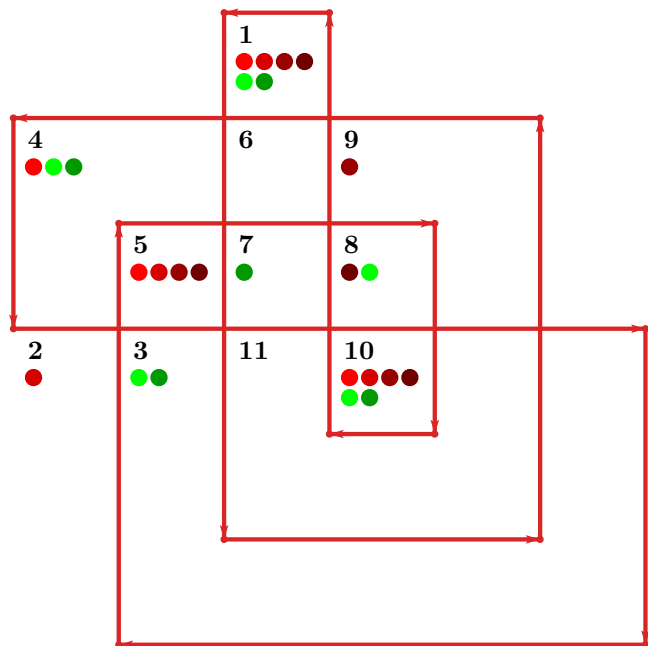


Figure 75: Snappy loop plot.

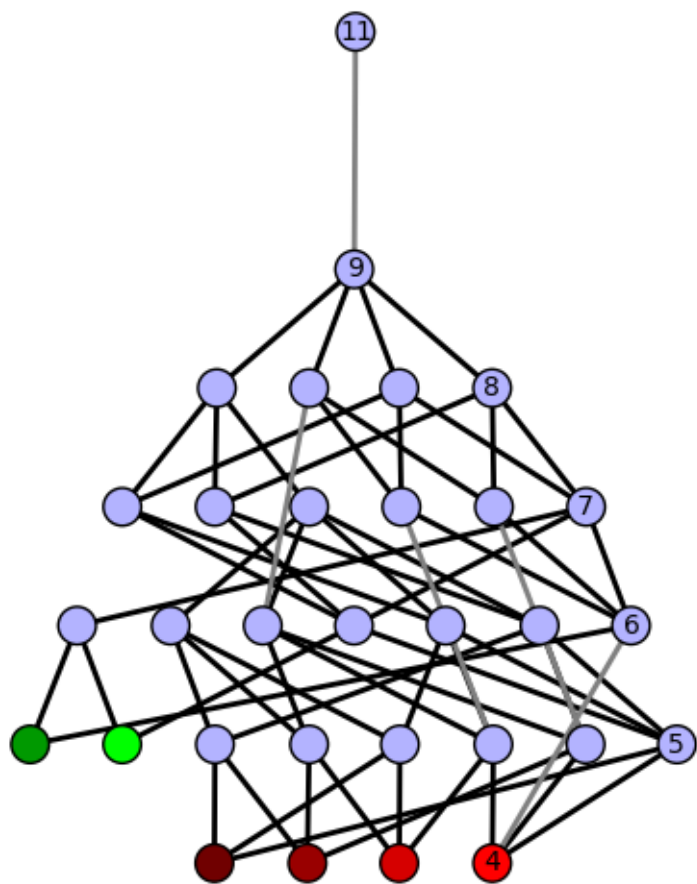


Figure 76: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 1
Total minimal pinning sets: 13
Total pinning sets: 326
Pinning number: 4
Average optimal gonality: 3.0
Average minimal gonality: 2.95
Average overall gonality: 3.15

9_34

Table 77: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	8	4	0	0	0	0	0	12
Nonminimal pinning sets	0	7	59	106	89	41	10	1	313
Average gonality	3.0	2.97	3.06	3.14	3.2	3.24	3.26	3.27	

Table 78: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{2, 4, 8, 11}	4	[3, 2, 3, 4]	3.0
a (minimal)	●	{1, 3, 4, 9, 10}	5	[3, 3, 2, 3, 3]	2.8
b (minimal)	●	{1, 3, 4, 8, 10}	5	[3, 3, 2, 3, 3]	2.8
c (minimal)	●	{1, 4, 7, 8, 10}	5	[3, 2, 4, 3, 3]	3.0
d (minimal)	●	{1, 4, 6, 9, 10}	5	[3, 2, 4, 3, 3]	3.0
e (minimal)	●	{2, 3, 4, 8, 9}	5	[3, 3, 2, 3, 3]	2.8
f (minimal)	●	{2, 3, 4, 9, 10}	5	[3, 3, 2, 3, 3]	2.8
g (minimal)	●	{2, 4, 5, 9, 10}	5	[3, 2, 4, 3, 3]	3.0
h (minimal)	●	{1, 2, 3, 4, 8}	5	[3, 3, 3, 2, 3]	2.8
i (minimal)	●	{1, 4, 5, 7, 9, 10}	6	[3, 2, 4, 4, 3, 3]	3.17
j (minimal)	●	{1, 4, 6, 8, 10, 11}	6	[3, 2, 4, 3, 3, 4]	3.17
k (minimal)	●	{2, 4, 6, 9, 10, 11}	6	[3, 2, 4, 3, 3, 4]	3.17
l (minimal)	●	{1, 2, 4, 8, 9, 10}	6	[3, 3, 2, 3, 3, 3]	2.83

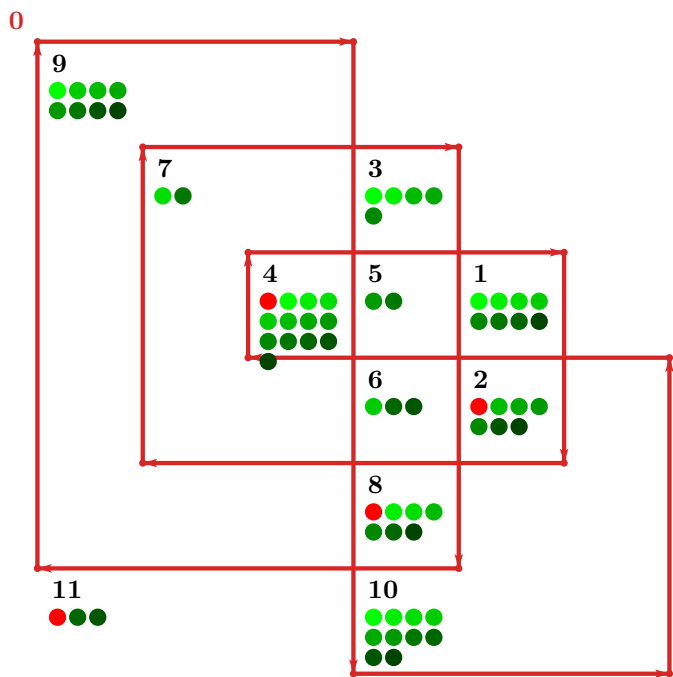


Figure 77: Snappy loop plot.

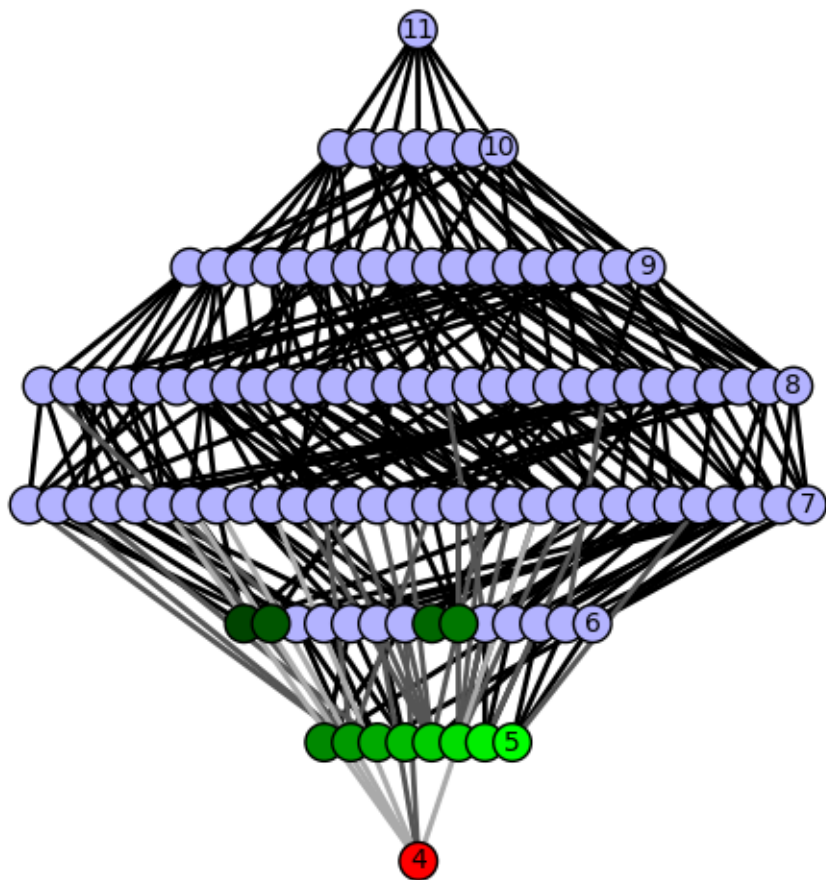


Figure 78: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 3
Total minimal pinning sets: 3
Total pinning sets: 112
Pinning number: 5
Average optimal gonality: 2.27
Average minimal gonality: 2.27
Average overall gonality: 2.91

9_37

Table 79: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	Total
Optimal pinning sets	3	0	0	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	15	31	34	21	7	1	109
Average gonality	2.27	2.6	2.83	2.99	3.11	3.2	3.27	

Table 80: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{2, 5, 6, 8, 10}	5	[2, 2, 3, 2, 2]	2.2
B (optimal)	●	{2, 4, 5, 8, 10}	5	[2, 4, 2, 2, 2]	2.4
C (optimal)	●	{2, 3, 5, 8, 10}	5	[2, 3, 2, 2, 2]	2.2

O

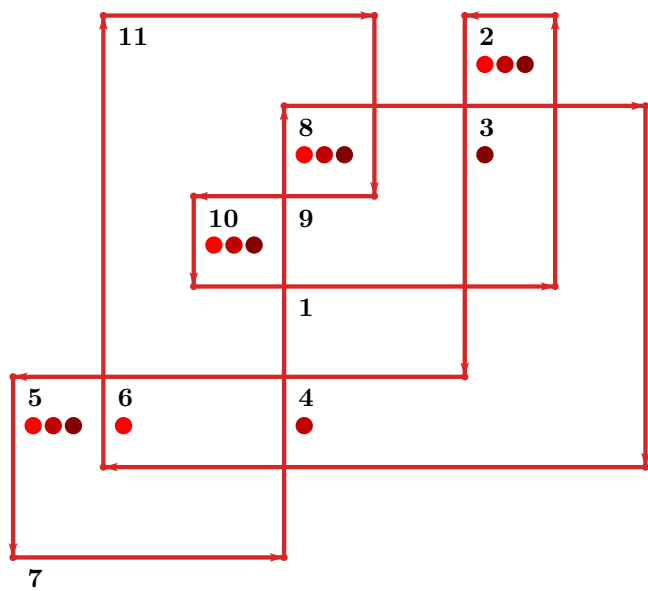


Figure 79: Snappy loop plot.

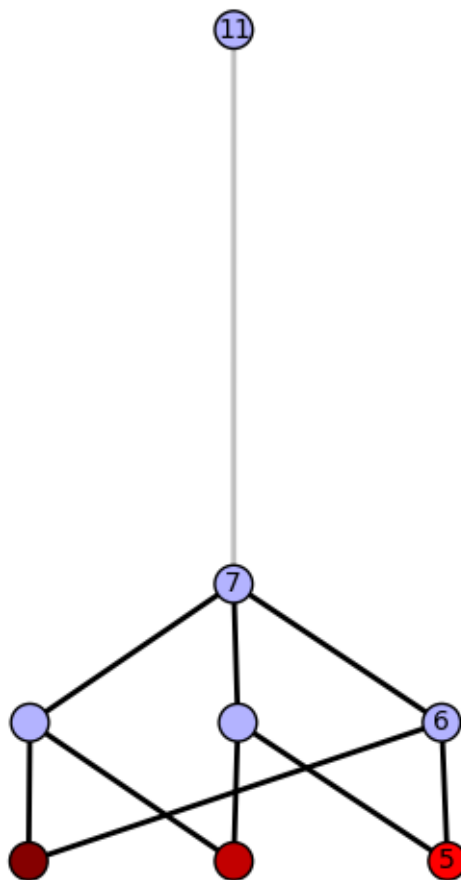


Figure 80: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_38

Total optimal pinning sets: 4
 Total minimal pinning sets: 4
 Total pinning sets: 240
 Pinning number: 4
 Average optimal gonality: 2.38
 Average minimal gonality: 2.38
 Average overall gonality: 2.98

Table 81: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	4	0	0	0	0	0	0	0	4
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	22	52	69	56	28	8	1	236
Average gonality	2.38	2.67	2.87	3.0	3.09	3.17	3.22	3.27	

Table 82: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 8, 11}	4	[2, 2, 2, 4]	2.5
B (optimal)	●	{1, 3, 8, 10}	4	[2, 2, 2, 3]	2.25
C (optimal)	●	{1, 3, 4, 8}	4	[2, 2, 4, 2]	2.5
D (optimal)	●	{1, 3, 5, 8}	4	[2, 2, 3, 2]	2.25

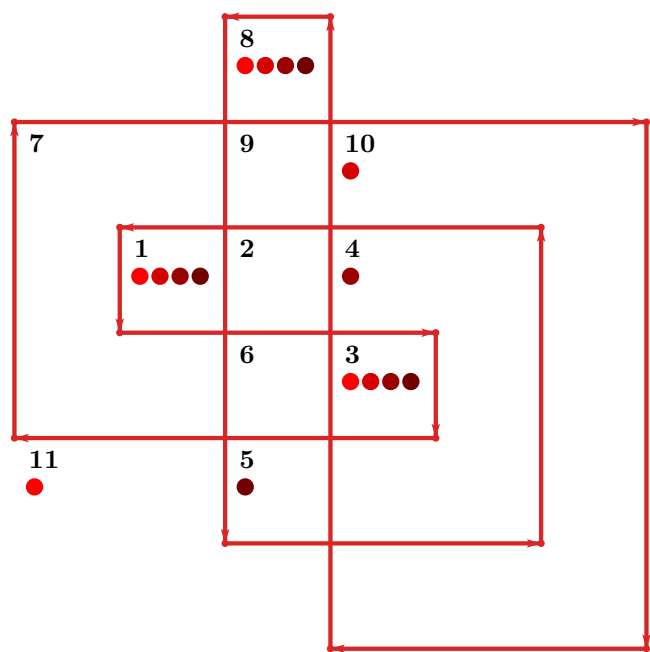


Figure 81: Snappy loop plot.

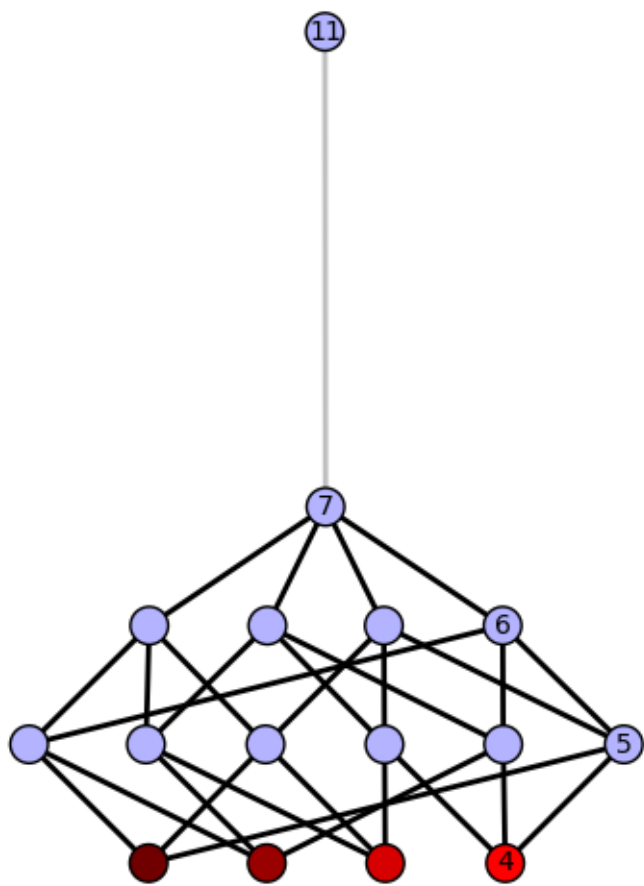


Figure 82: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

9_39

Total optimal pinning sets: 1
 Total minimal pinning sets: 4
 Total pinning sets: 184
 Pinning number: 4
 Average optimal gonality: 2.25
 Average minimal gonality: 2.46
 Average overall gonality: 2.98

Table 83: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	3	0	0	0	0	0	0	3
Nonminimal pinning sets	0	7	33	54	50	27	8	1	180
Average gonality	2.25	2.56	2.79	2.96	3.08	3.16	3.23	3.27	

Table 84: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 8}	4	[3, 2, 2, 2]	2.25
a (minimal)	●	{2, 4, 5, 8, 10}	5	[2, 3, 2, 2, 3]	2.4
b (minimal)	●	{2, 3, 5, 8, 10}	5	[2, 4, 2, 2, 3]	2.6
c (minimal)	●	{2, 5, 6, 8, 10}	5	[2, 2, 4, 2, 3]	2.6

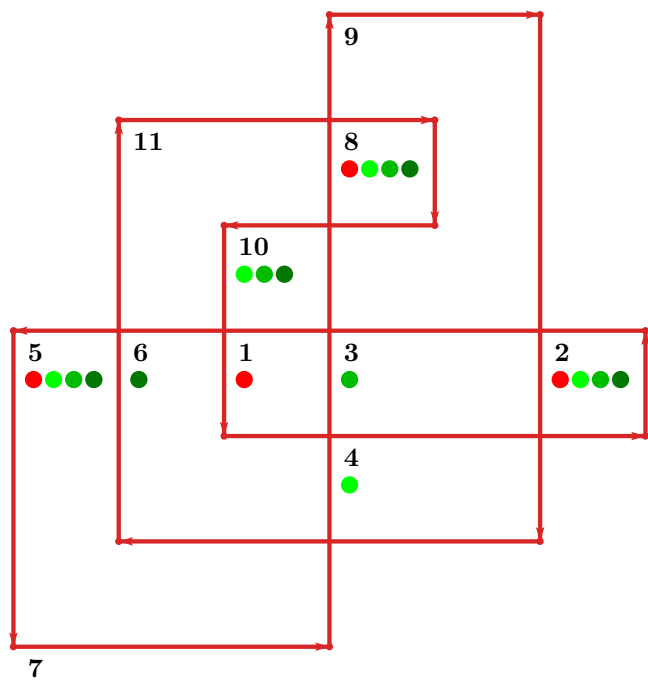


Figure 83: Snappy loop plot.

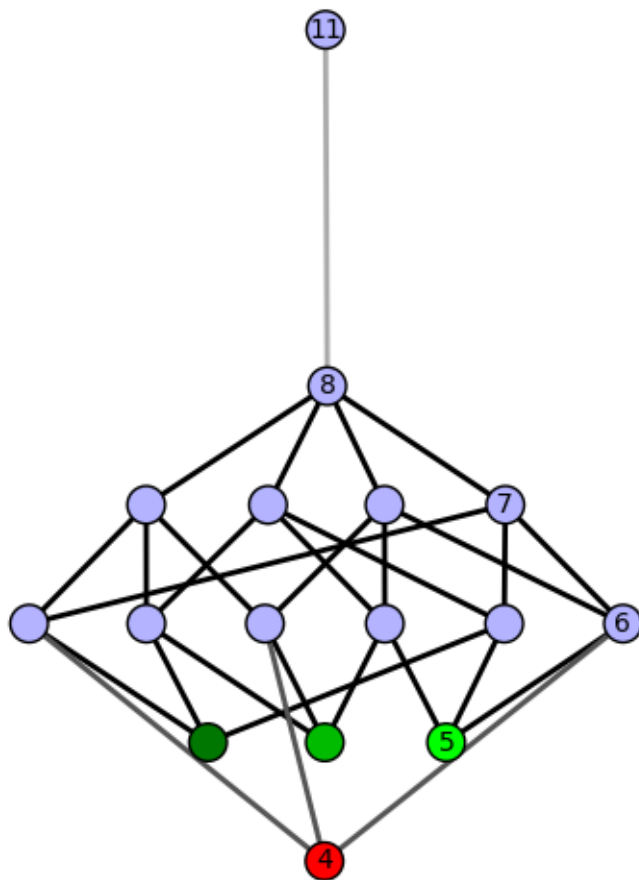


Figure 84: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 2
Total minimal pinning sets: 13
Total pinning sets: 395
Pinning number: 4
Average optimal gonality: 3.0
Average minimal gonality: 3.25
Average overall gonality: 3.23

9_40

Table 85: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	2	0	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	4	7	0	0	0	0	0	11
Nonminimal pinning sets	0	14	66	130	111	49	11	1	382
Average gonality	3.0	3.13	3.21	3.23	3.25	3.27	3.27	3.27	

Table 86: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{2, 6, 9, 10}	4	[3, 3, 3, 3]	3.0
B (optimal)	●	{1, 3, 4, 8}	4	[3, 3, 3, 3]	3.0
a (minimal)	●	{2, 4, 6, 8, 11}	5	[3, 3, 3, 3, 4]	3.2
b (minimal)	●	{2, 3, 7, 8, 10}	5	[3, 3, 4, 3, 3]	3.2
c (minimal)	●	{1, 2, 5, 8, 9}	5	[3, 3, 4, 3, 3]	3.2
d (minimal)	●	{2, 5, 7, 8, 11}	5	[3, 4, 4, 3, 4]	3.6
e (minimal)	●	{2, 6, 7, 8, 10, 11}	6	[3, 3, 4, 3, 3, 4]	3.33
f (minimal)	●	{1, 3, 4, 6, 9, 10}	6	[3, 3, 3, 3, 3, 3]	3.0
g (minimal)	●	{2, 3, 4, 7, 8, 11}	6	[3, 3, 3, 4, 3, 4]	3.33
h (minimal)	●	{2, 5, 6, 8, 9, 11}	6	[3, 4, 3, 3, 3, 4]	3.33
i (minimal)	●	{2, 5, 7, 8, 9, 10}	6	[3, 4, 4, 3, 3, 3]	3.33
j (minimal)	●	{1, 2, 4, 5, 8, 11}	6	[3, 3, 3, 4, 3, 4]	3.33
k (minimal)	●	{1, 2, 3, 5, 7, 8}	6	[3, 3, 3, 4, 4, 3]	3.33

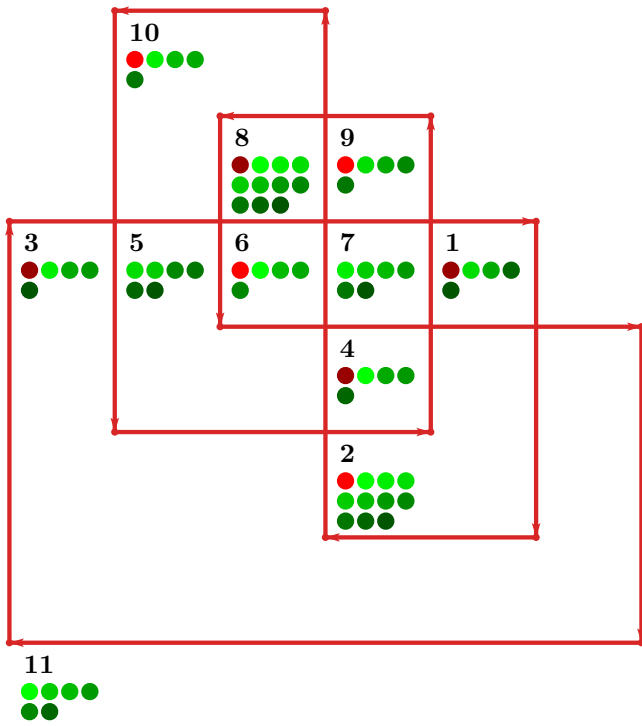


Figure 85: Snappy loop plot.

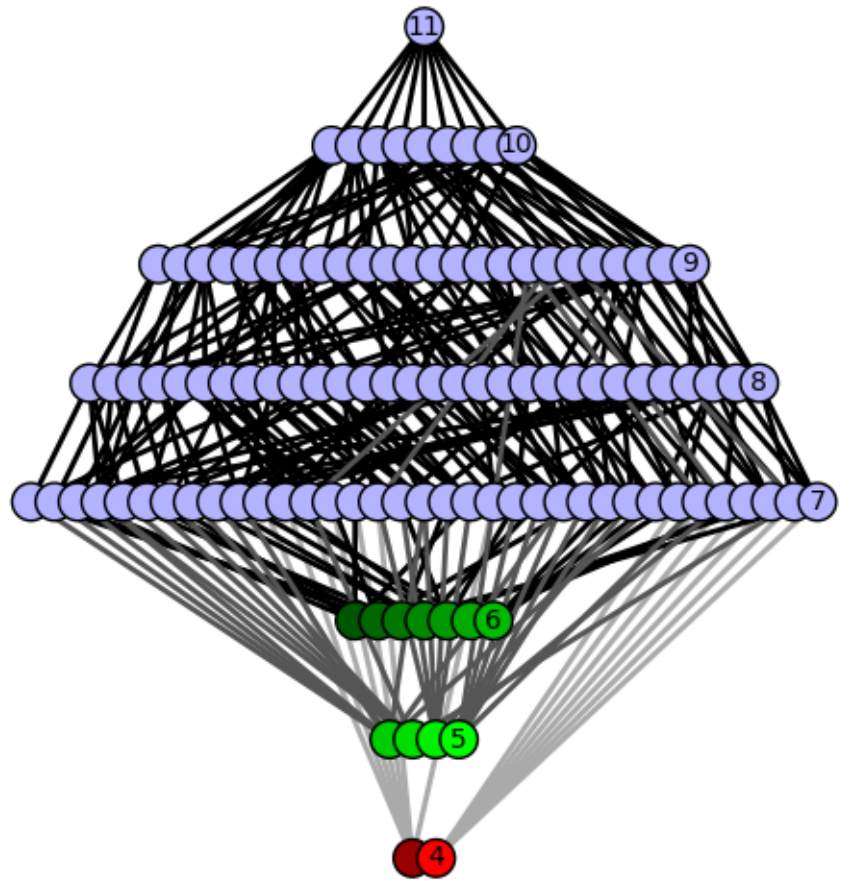


Figure 86: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 144
Pinning number: 4
Average optimal gonality: 2.25
Average minimal gonality: 2.38
Average overall gonality: 2.97

9_41

Table 87: Pinning sets/average gonality by cardinal

Cardinal	4	5	6	7	8	9	10	11	Total
Optimal pinning sets	1	0	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	0	1	0	0	0	0	0	1
Nonminimal pinning sets	0	7	21	39	41	25	8	1	142
Average gonality	2.25	2.57	2.77	2.92	3.05	3.15	3.23	3.27	

Table 88: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 3, 6, 10}	4	[2, 2, 3, 2]	2.25
a (minimal)	●	{1, 3, 4, 7, 8, 10}	6	[2, 2, 3, 3, 3, 2]	2.5

0

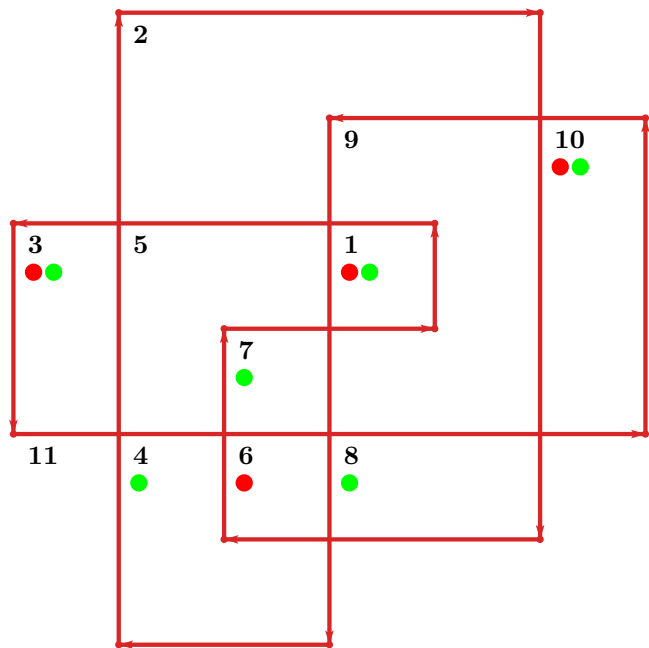


Figure 87: Snappy loop plot.



Figure 88: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_2

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 20
Pinning number: 8
Average optimal gonality: 2.12
Average minimal gonality: 2.17
Average overall gonality: 2.82

Table 89: Pinning sets/average gonality by cardinal

Cardinal	8	9	10	11	12	Total
Optimal pinning sets	1	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	1
Nonminimal pinning sets	0	4	8	5	1	18
Average gonality	2.12	2.47	2.85	3.16	3.33	

Table 90: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 4, 5, 7, 9, 11}	8	[2, 2, 2, 2, 2, 3, 2, 2]	2.12
a (minimal)	●	{1, 2, 3, 4, 5, 6, 8, 9, 10}	9	[2, 2, 2, 2, 2, 3, 3, 2, 2]	2.22

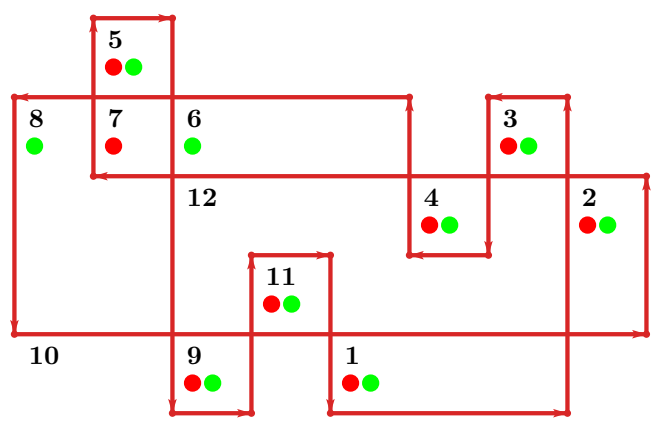


Figure 89: Snappy loop plot.



Figure 90: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_5

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 40
Pinning number: 7
Average optimal gonality: 2.14
Average minimal gonality: 2.2
Average overall gonality: 2.86

Table 91: Pinning sets/average gonality by cardinal

Cardinal	7	8	9	10	11	12	Total
Optimal pinning sets	1	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	1
Nonminimal pinning sets	0	5	13	13	6	1	38
Average gonality	2.14	2.46	2.76	3.02	3.21	3.33	

Table 92: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 4, 6, 9, 11}	7	[2, 2, 2, 2, 3, 2, 2]	2.14
a (minimal)	●	{1, 2, 3, 4, 7, 8, 9, 11}	8	[2, 2, 2, 2, 3, 3, 2, 2]	2.25

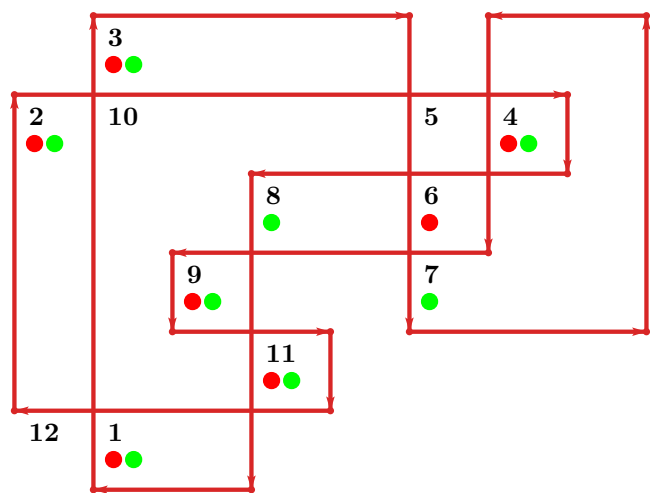


Figure 91: Snappy loop plot.



Figure 92: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):



Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 7
Average optimal gonality: 2.14
Average minimal gonality: 2.14
Average overall gonality: 2.86

10_7

Table 93: Pinning sets/average gonality by cardinal

Cardinal	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.14	2.53	2.82	3.04	3.21	3.33	

Table 94: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)		{1, 2, 5, 7, 8, 9, 11}	7	[2, 2, 3, 2, 2, 2, 2]	2.14
B (optimal)		{1, 2, 4, 7, 8, 9, 11}	7	[2, 2, 3, 2, 2, 2, 2]	2.14

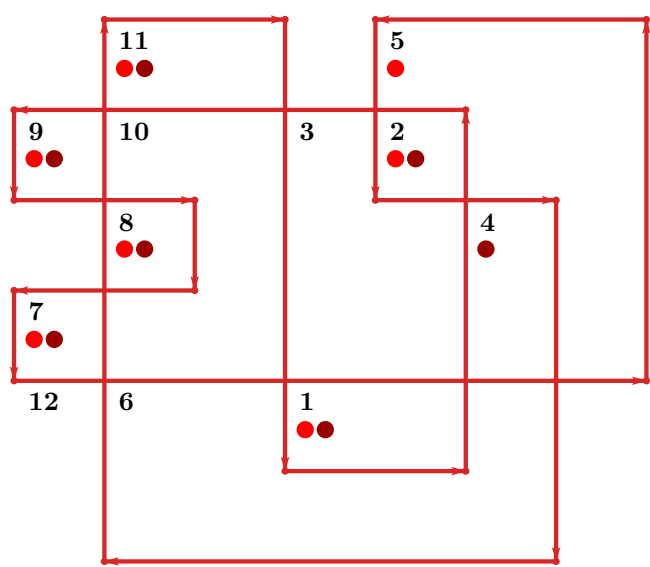


Figure 93: Snappy loop plot.



Figure 94: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_9

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 7
Average optimal gonality: 2.14
Average minimal gonality: 2.14
Average overall gonality: 2.86

Table 95: Pinning sets/average gonality by cardinal

Cardinal	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.14	2.53	2.82	3.04	3.21	3.33	

Table 96: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 4, 8, 9, 11}	7	[2, 2, 2, 2, 3, 2, 2]	2.14
B (optimal)	●	{1, 2, 3, 4, 6, 9, 11}	7	[2, 2, 2, 2, 3, 2, 2]	2.14

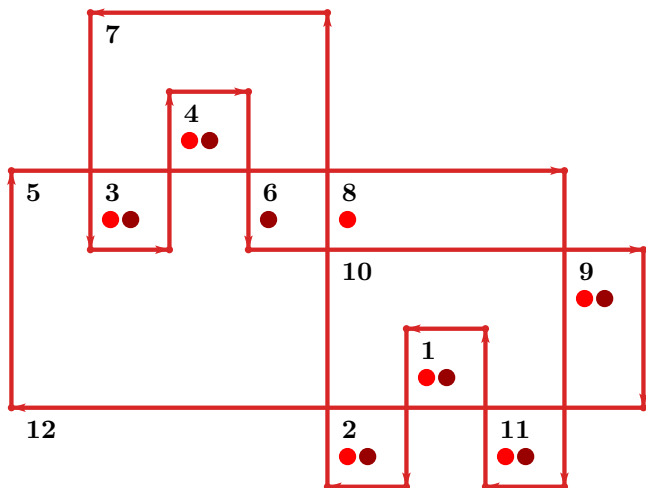


Figure 95: Snappy loop plot.



Figure 96: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_10

Total optimal pinning sets: 3
Total minimal pinning sets: 3
Total pinning sets: 64
Pinning number: 7
Average optimal gonality: 2.29
Average minimal gonality: 2.29
Average overall gonality: 2.92

Table 97: Pinning sets/average gonality by cardinal

Cardinal	7	8	9	10	11	12	Total
Optimal pinning sets	3	0	0	0	0	0	3
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	13	22	18	7	1	61
Average gonality	2.29	2.63	2.9	3.1	3.25	3.33	

Table 98: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 5, 6, 9, 11}	7	[2, 2, 2, 3, 3, 2, 2]	2.29
B (optimal)	●	{1, 2, 3, 6, 7, 9, 11}	7	[2, 2, 2, 3, 3, 2, 2]	2.29
C (optimal)	●	{1, 2, 3, 7, 8, 9, 11}	7	[2, 2, 2, 3, 3, 2, 2]	2.29

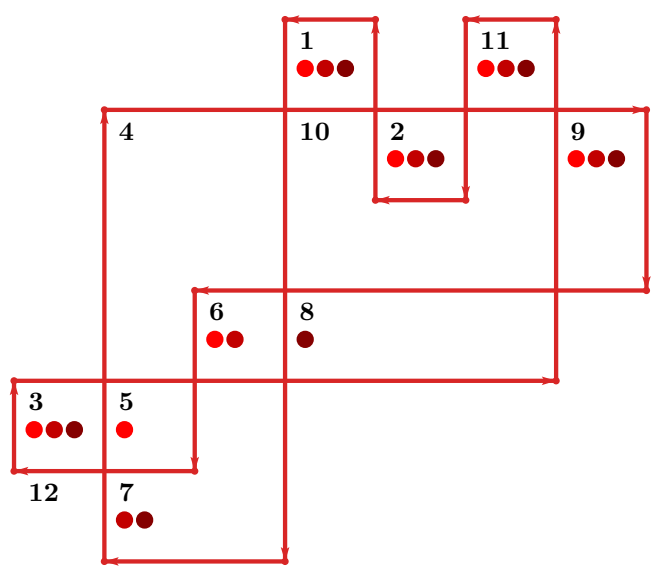


Figure 97: Snappy loop plot.

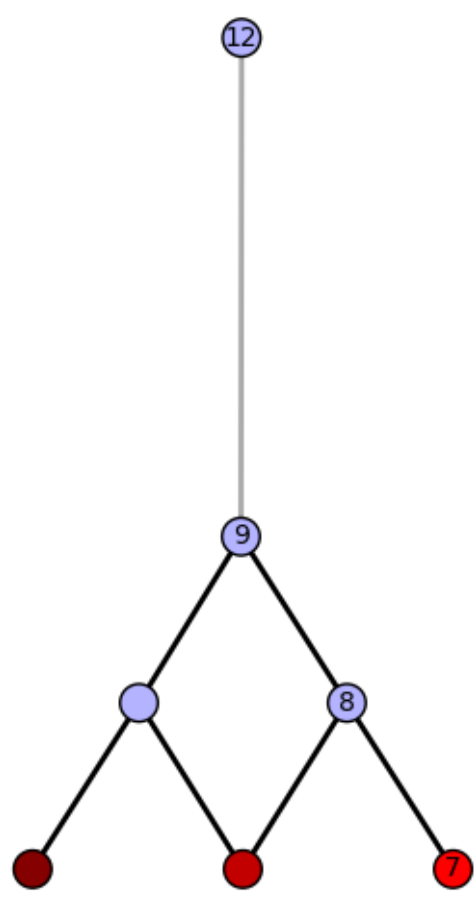


Figure 98: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_12

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 7
Average optimal gonality: 2.14
Average minimal gonality: 2.14
Average overall gonality: 2.86

Table 99: Pinning sets/average gonality by cardinal

Cardinal	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.14	2.53	2.82	3.04	3.21	3.33	

Table 100: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 6, 7, 9, 11}	7	[2, 2, 2, 2, 3, 2, 2]	2.14
B (optimal)	●	{1, 2, 3, 5, 6, 9, 11}	7	[2, 2, 2, 3, 2, 2, 2]	2.14

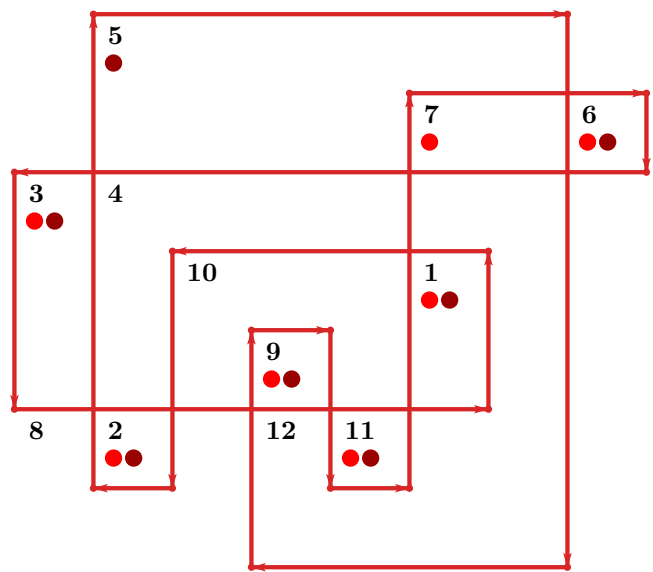


Figure 99: Snappy loop plot.



Figure 100: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_14

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 80
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.23
Average overall gonality: 2.91

Table 101: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	12	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	0	1
Nonminimal pinning sets	0	6	19	26	19	7	1	78
Average gonality	2.17	2.47	2.73	2.94	3.12	3.25	3.33	

Table 102: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 5, 6, 9, 11}	6	[2, 2, 3, 2, 2, 2]	2.17
a (minimal)	●	{1, 2, 3, 6, 7, 9, 11}	7	[2, 2, 3, 2, 3, 2, 2]	2.29

0

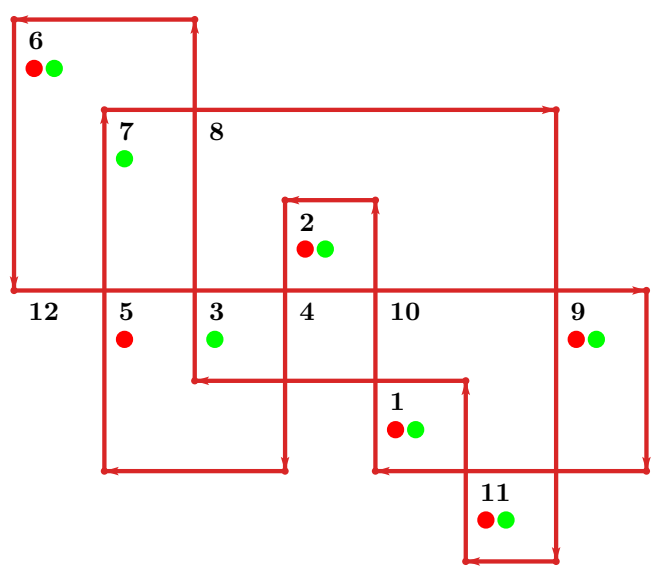


Figure 101: Snappy loop plot.



Figure 102: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_17

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 7
Average optimal gonality: 2.14
Average minimal gonality: 2.14
Average overall gonality: 2.86

Table 103: Pinning sets/average gonality by cardinal

Cardinal	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.14	2.53	2.82	3.04	3.21	3.33	

Table 104: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 7, 8, 9, 11}	7	[2, 2, 2, 3, 2, 2, 2]	2.14
B (optimal)	●	{1, 2, 3, 5, 8, 9, 11}	7	[2, 2, 2, 3, 2, 2, 2]	2.14

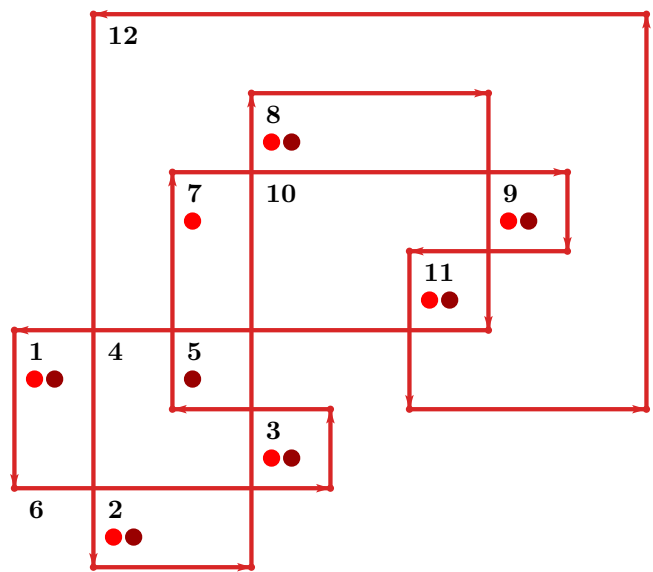


Figure 103: Snappy loop plot.

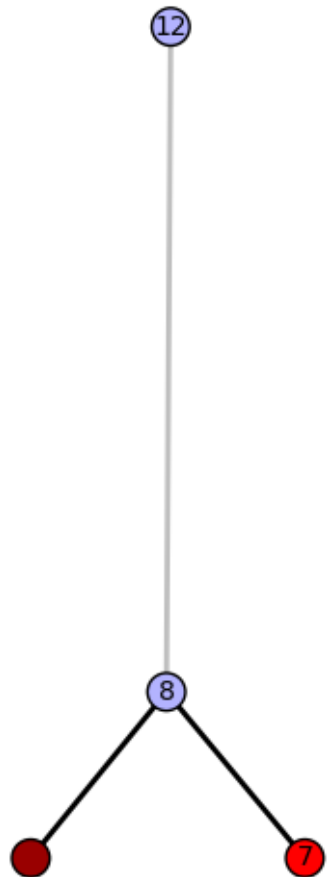


Figure 104: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):




Total optimal pinning sets: 1
Total minimal pinning sets: 3
Total pinning sets: 88
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.29
Average overall gonality: 2.92

10_18

Table 105: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	12	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	2	0	0	0	0	0	2
Nonminimal pinning sets	0	6	22	29	20	7	1	85
Average gonality	2.17	2.46	2.74	2.97	3.13	3.25	3.33	

Table 106: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)		{1, 2, 3, 6, 9, 11}	6	[2, 2, 3, 2, 2, 2]	2.17
a (minimal)		{1, 2, 4, 6, 7, 9, 11}	7	[2, 2, 3, 2, 3, 2, 2]	2.29
b (minimal)		{1, 2, 4, 5, 6, 9, 11}	7	[2, 2, 3, 4, 2, 2, 2]	2.43

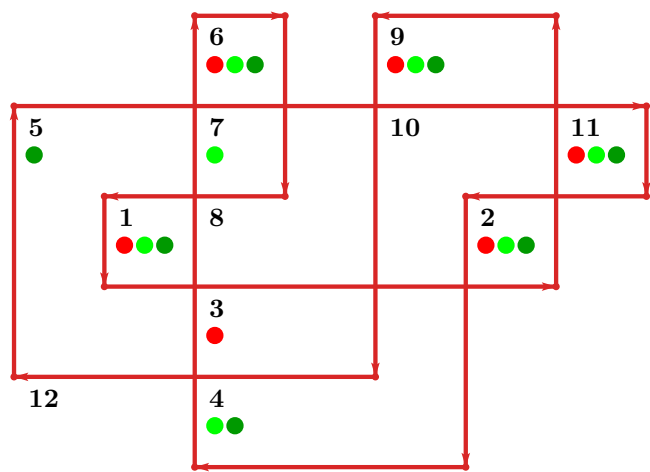


Figure 105: Snappy loop plot.

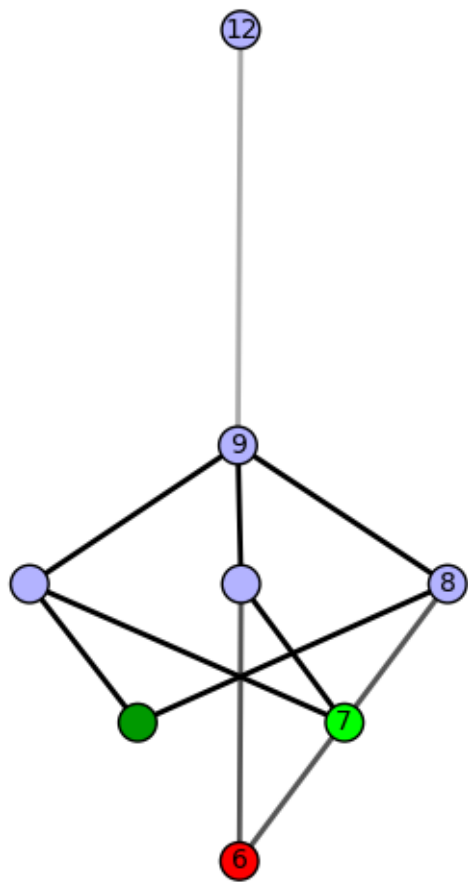


Figure 106: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):



Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 80
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.23
Average overall gonality: 2.91

10_19

Table 107: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	12	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	0	1
Nonminimal pinning sets	0	6	19	26	19	7	1	78
Average gonality	2.17	2.47	2.73	2.94	3.12	3.25	3.33	

Table 108: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)		{1, 3, 5, 6, 9, 11}	6	[2, 3, 2, 2, 2, 2]	2.17
a (minimal)		{1, 2, 4, 5, 6, 9, 11}	7	[2, 3, 3, 2, 2, 2, 2]	2.29

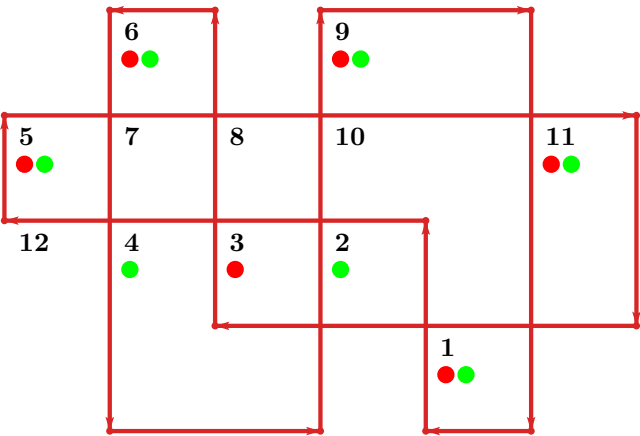


Figure 107: Snappy loop plot.



Figure 108: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_21

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 48
Pinning number: 7
Average optimal gonality: 2.14
Average minimal gonality: 2.14
Average overall gonality: 2.86

Table 109: Pinning sets/average gonality by cardinal

Cardinal	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0
Nonminimal pinning sets	0	9	16	14	6	1	46
Average gonality	2.14	2.53	2.82	3.04	3.21	3.33	

Table 110: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 5, 6, 9, 10}	7	[2, 2, 2, 2, 2, 2, 3]	2.14
B (optimal)	●	{1, 2, 3, 5, 6, 9, 11}	7	[2, 2, 2, 2, 2, 2, 3]	2.14

0

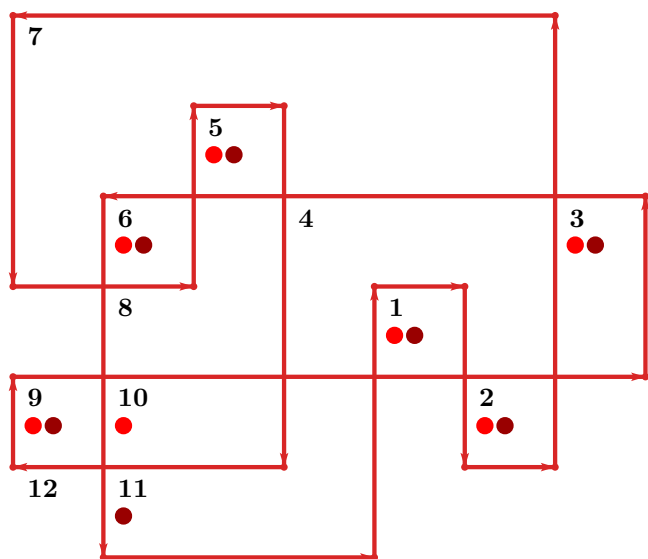


Figure 109: Snappy loop plot.



Figure 110: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_23

Total optimal pinning sets: 1
Total minimal pinning sets: 2
Total pinning sets: 80
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.23
Average overall gonality: 2.91

Table 111: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	12	Total
Optimal pinning sets	1	0	0	0	0	0	0	1
Minimal (suboptimal) pinning sets	0	1	0	0	0	0	0	1
Nonminimal pinning sets	0	6	19	26	19	7	1	78
Average gonality	2.17	2.47	2.73	2.94	3.12	3.25	3.33	

Table 112: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 4, 5, 6, 9, 11}	6	[2, 3, 2, 2, 2, 2]	2.17
a (minimal)	●	{1, 2, 3, 5, 6, 9, 11}	7	[2, 3, 3, 2, 2, 2, 2]	2.29

O

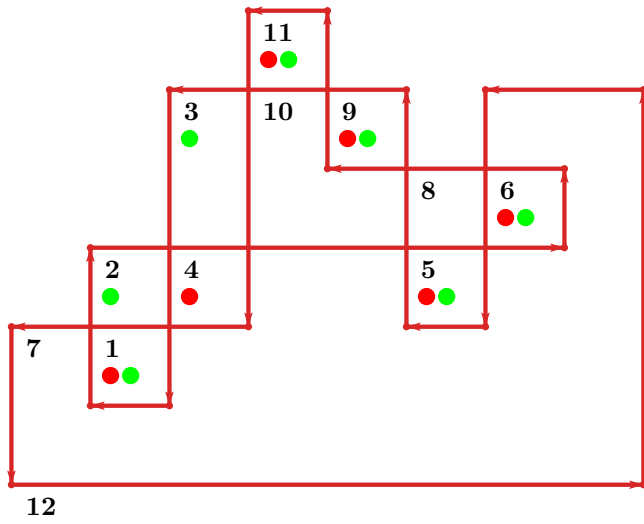


Figure 111: Snappy loop plot.



Figure 112: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):



Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 96
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.17
Average overall gonality: 2.91

10_25

Table 113: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	11	25	30	20	7	1	94
Average gonality	2.17	2.52	2.78	2.98	3.13	3.25	3.33	

Table 114: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)		{1, 3, 6, 7, 9, 11}	6	[2, 2, 2, 3, 2, 2]	2.17
B (optimal)		{1, 3, 5, 6, 9, 11}	6	[2, 2, 3, 2, 2, 2]	2.17

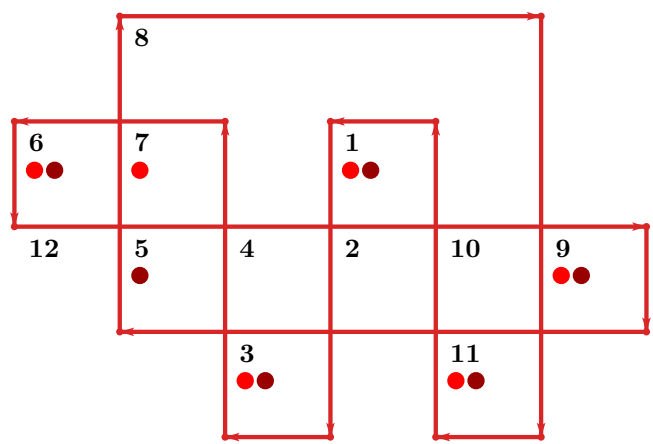


Figure 113: Snappy loop plot.



Figure 114: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_26

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 96
Pinning number: 6
Average optimal gonality: 2.17
Average minimal gonality: 2.17
Average overall gonality: 2.91

Table 115: Pinning sets/average gonality by cardinal

Cardinal	6	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	11	25	30	20	7	1	94
Average gonality	2.17	2.52	2.78	2.98	3.13	3.25	3.33	

Table 116: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 3, 7, 9, 11}	6	[2, 2, 2, 3, 2, 2]	2.17
B (optimal)	●	{1, 2, 3, 6, 9, 11}	6	[2, 2, 2, 3, 2, 2]	2.17

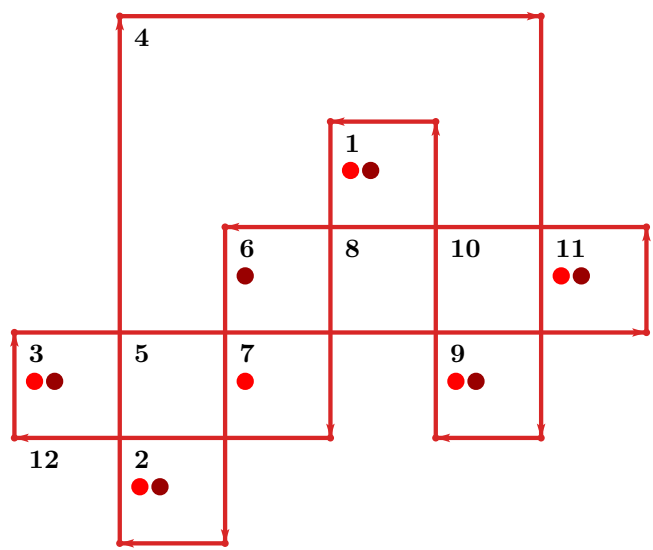


Figure 115: Snappy loop plot.



Figure 116: Minimal join semilattice of pinning sets.

Input PD code or string to snappy (use to reproduce the drawing):
10_27

Total optimal pinning sets: 2
Total minimal pinning sets: 2
Total pinning sets: 192
Pinning number: 5
Average optimal gonality: 2.2
Average minimal gonality: 2.2
Average overall gonality: 2.97

Table 117: Pinning sets/average gonality by cardinal

Cardinal	5	6	7	8	9	10	11	12	Total
Optimal pinning sets	2	0	0	0	0	0	0	0	2
Minimal (suboptimal) pinning sets	0	0	0	0	0	0	0	0	0
Nonminimal pinning sets	0	13	36	55	50	27	8	1	190
Average gonality	2.2	2.54	2.78	2.95	3.09	3.19	3.27	3.33	

Table 118: Pinning set data

Pinning set	Pindicator	Regions	Card	Gonality seq	Average gonality
A (optimal)	●	{1, 2, 4, 9, 11}	5	[2, 2, 2, 3, 2]	2.2
B (optimal)	●	{1, 2, 4, 7, 11}	5	[2, 2, 2, 3, 2]	2.2

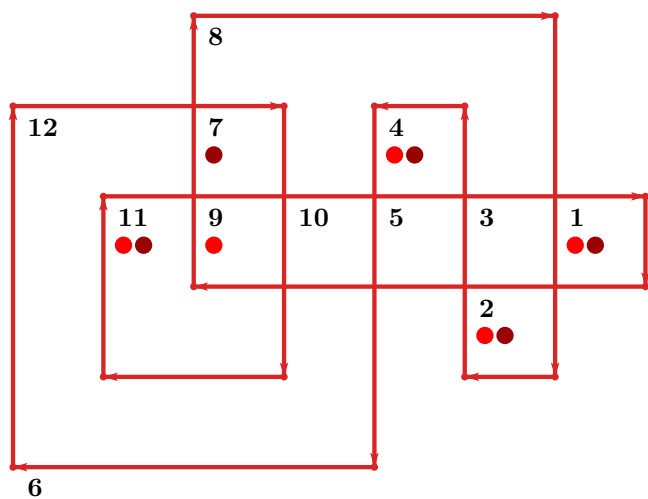


Figure 117: Snappy loop plot.



Figure 118: Minimal join semilattice of pinning sets.