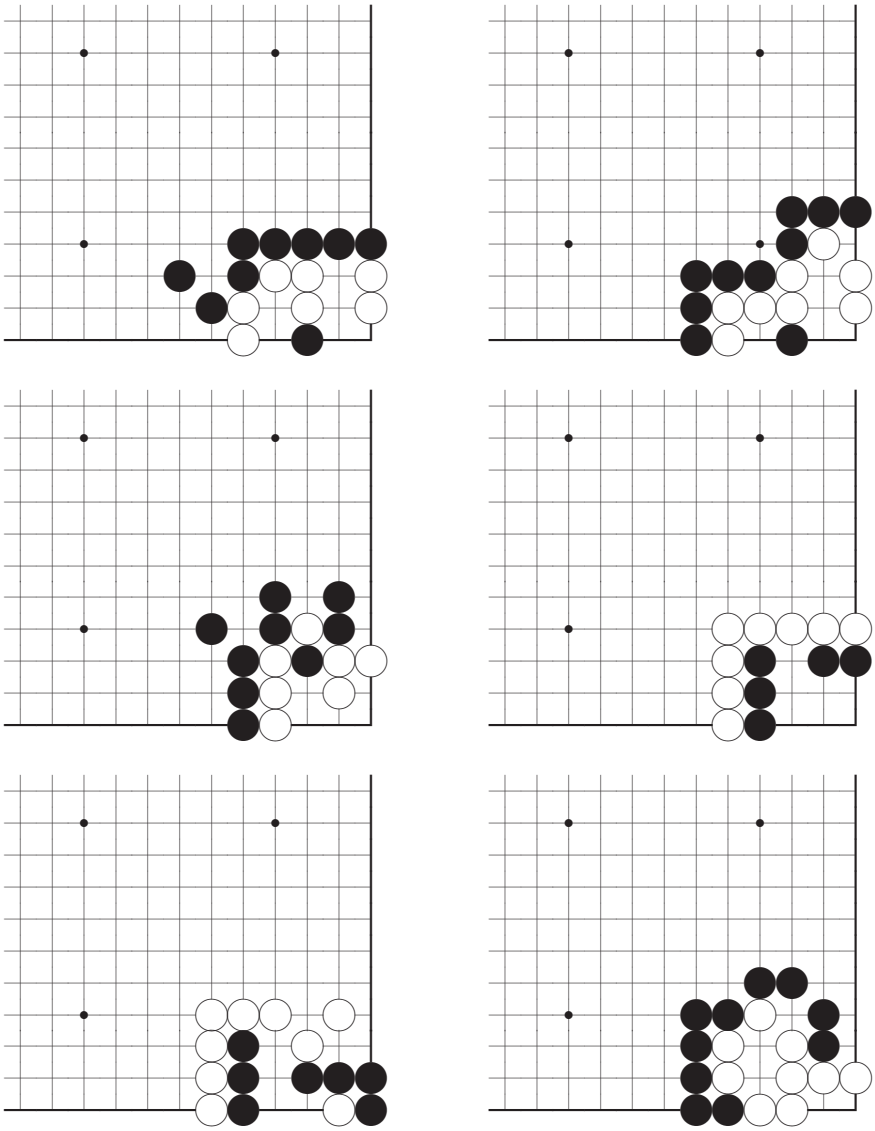
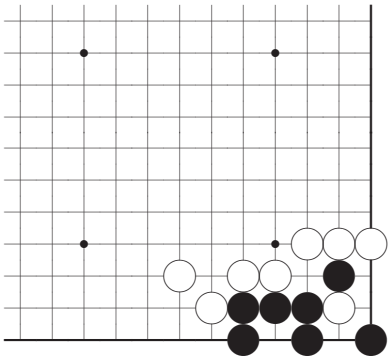
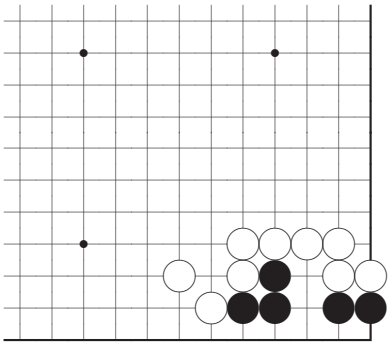
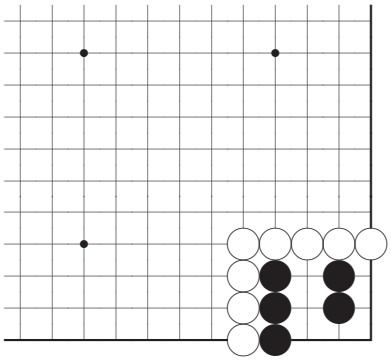
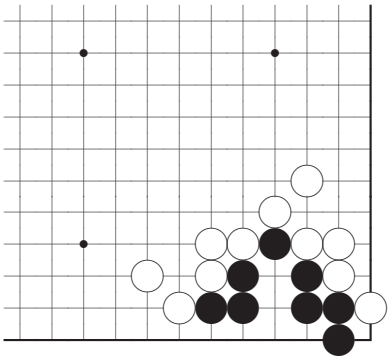
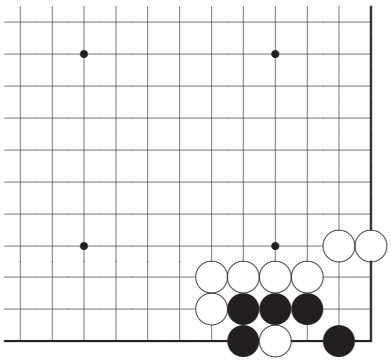


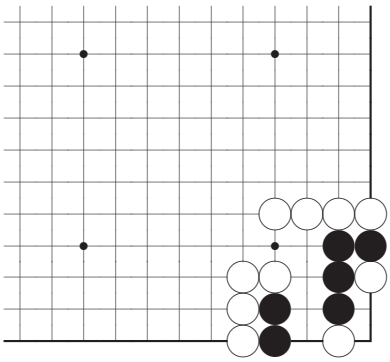


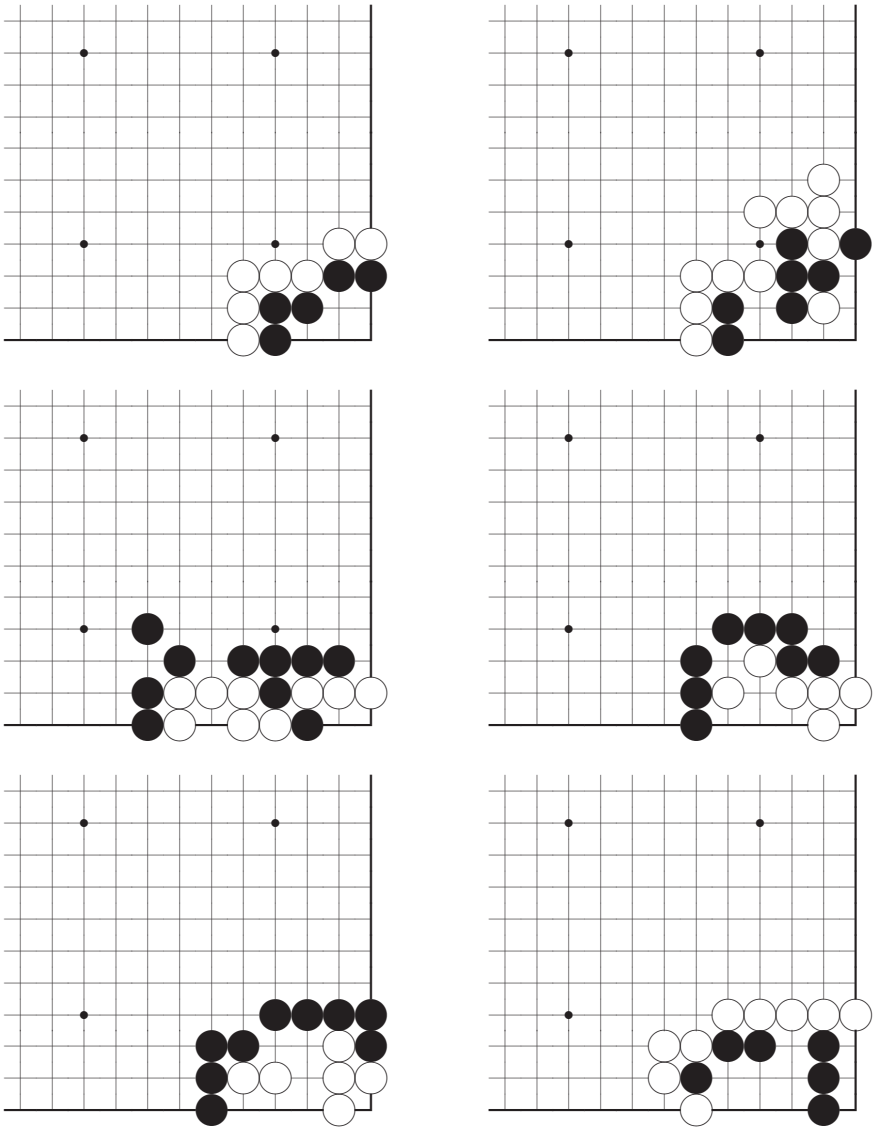


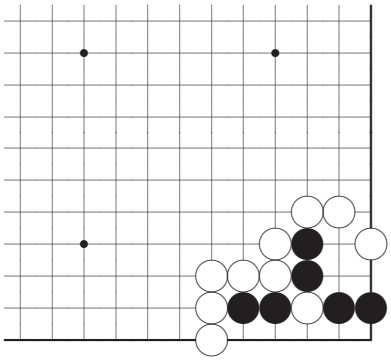


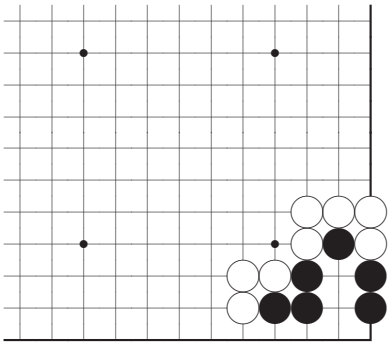


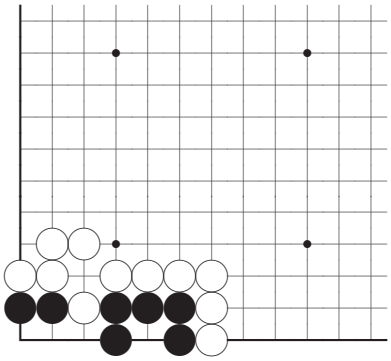


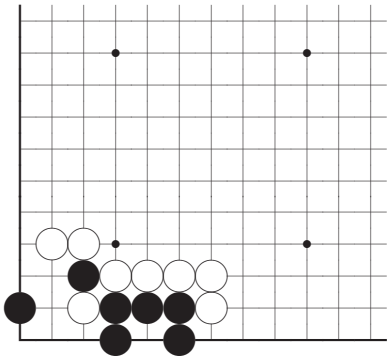


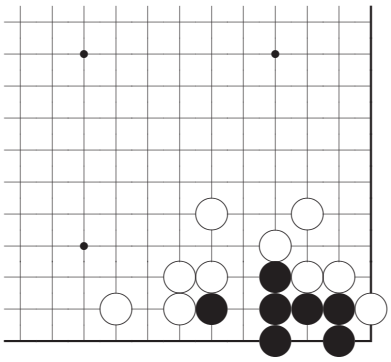


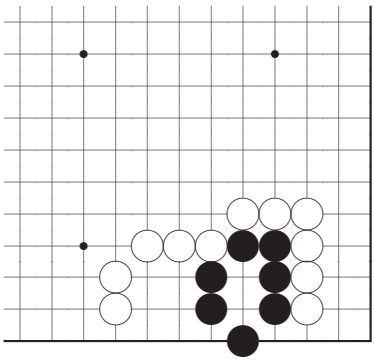


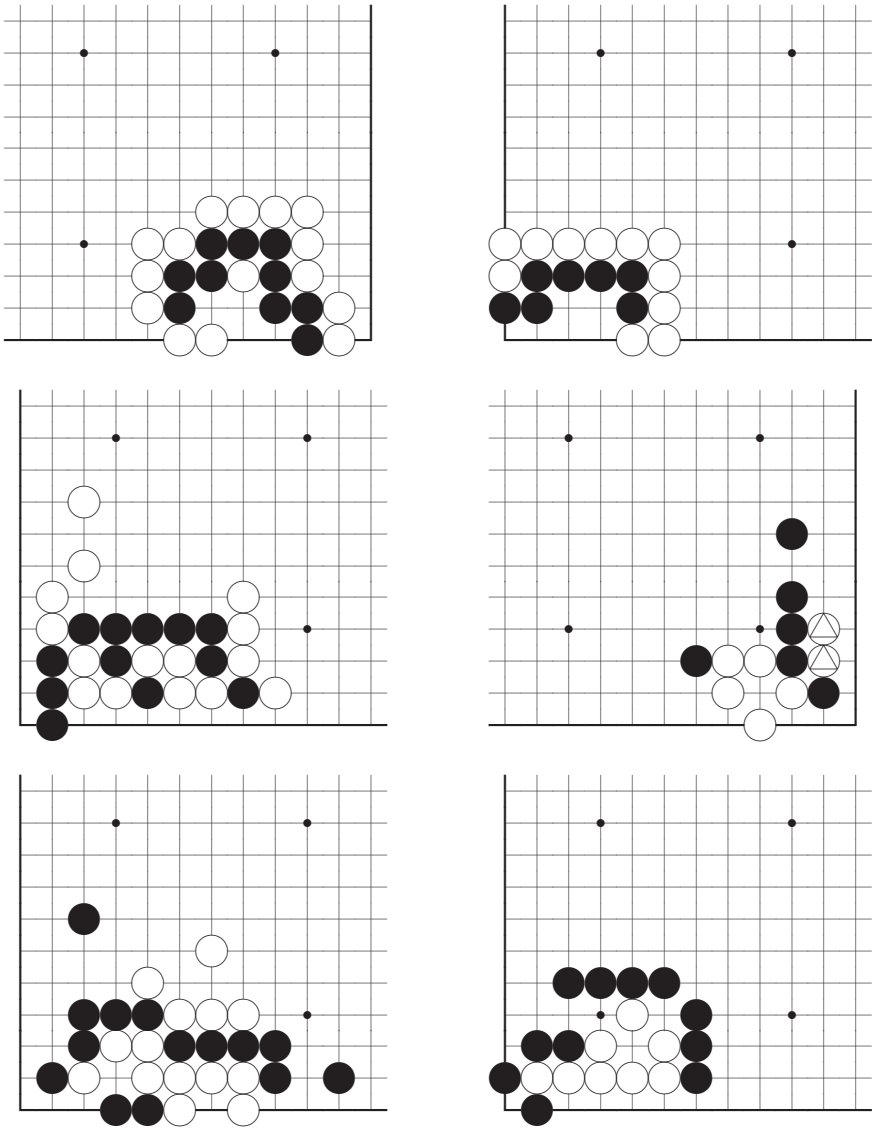


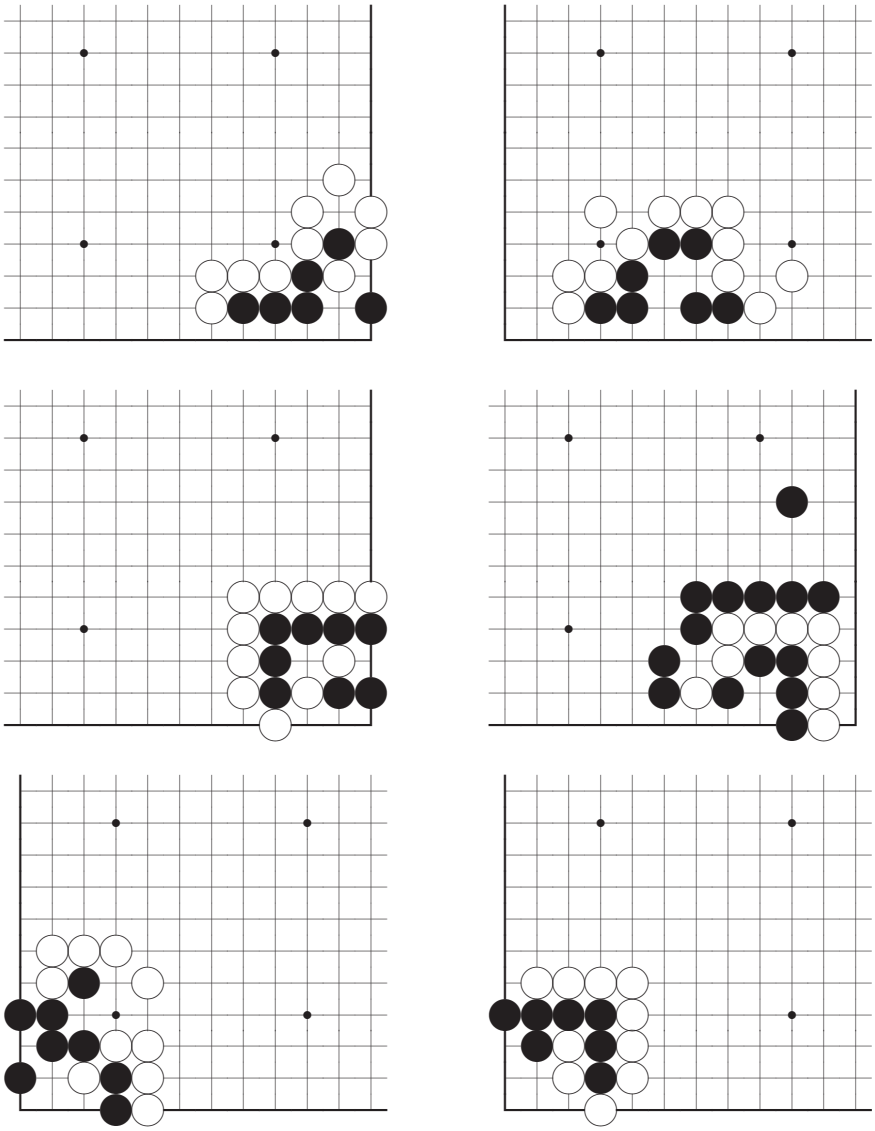


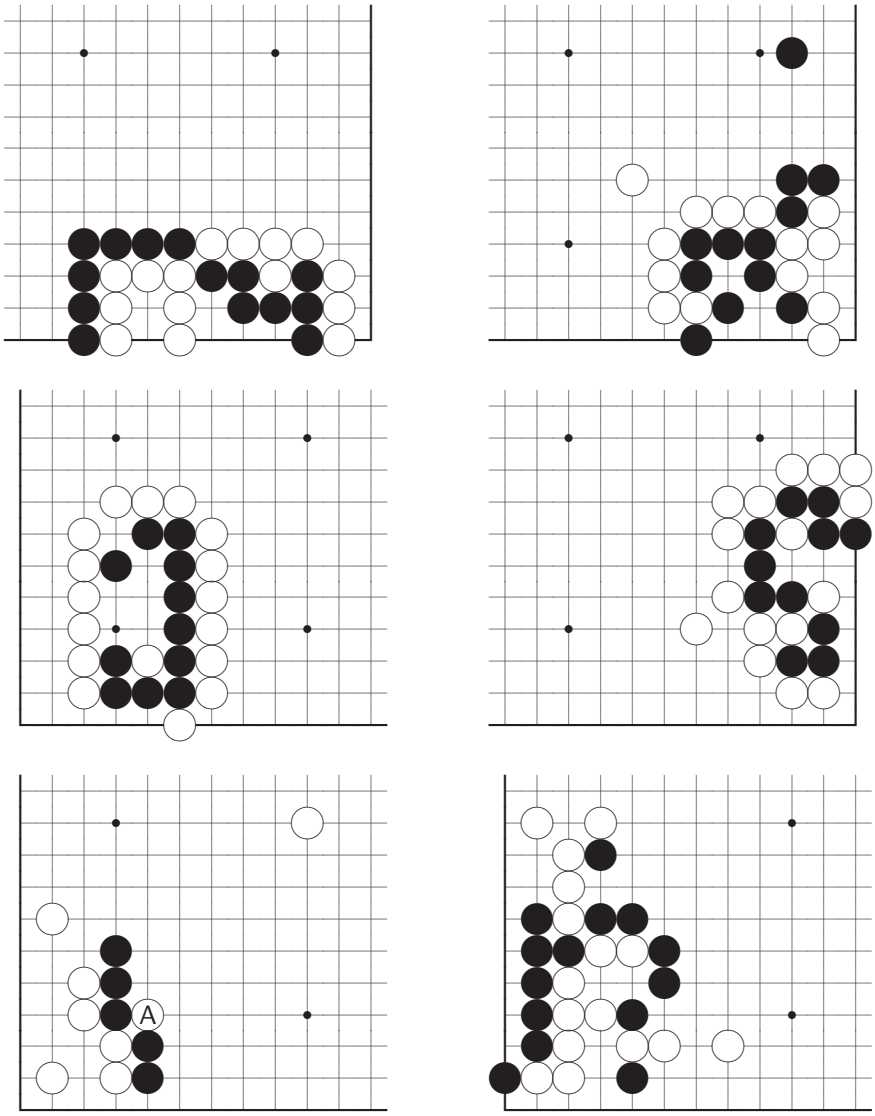


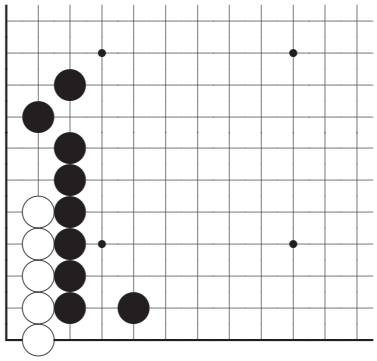


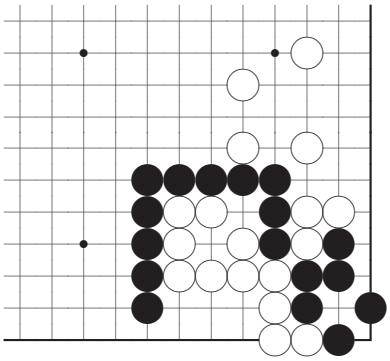


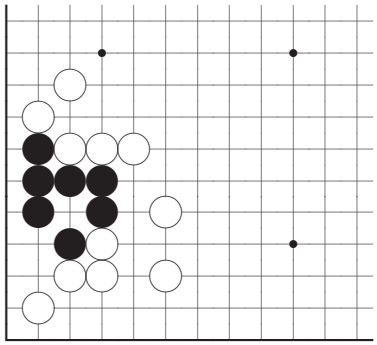


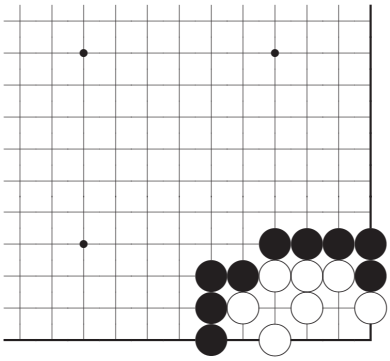


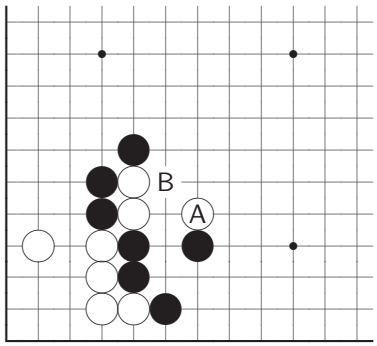

A

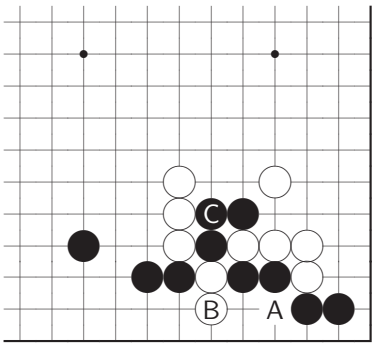


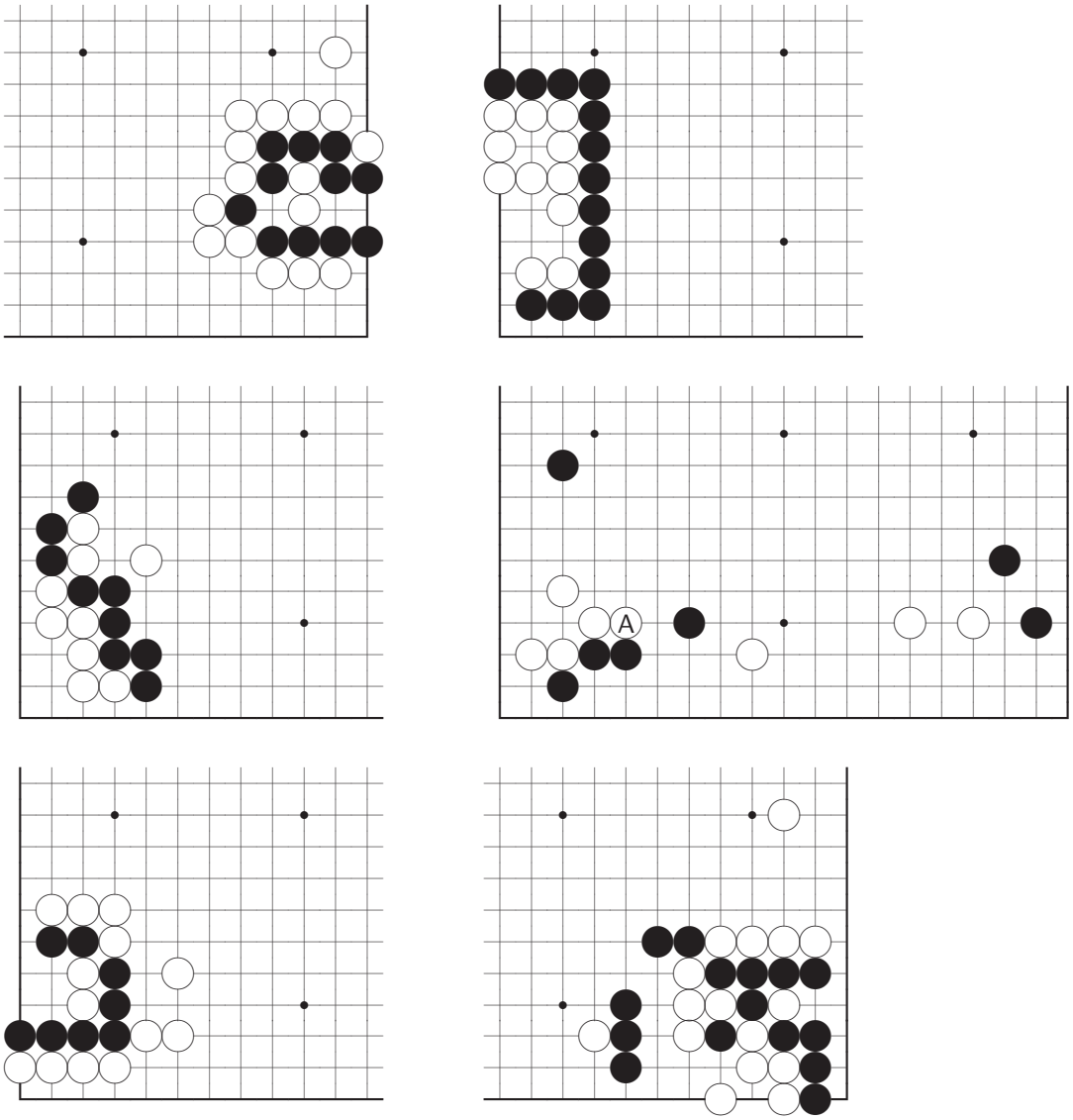


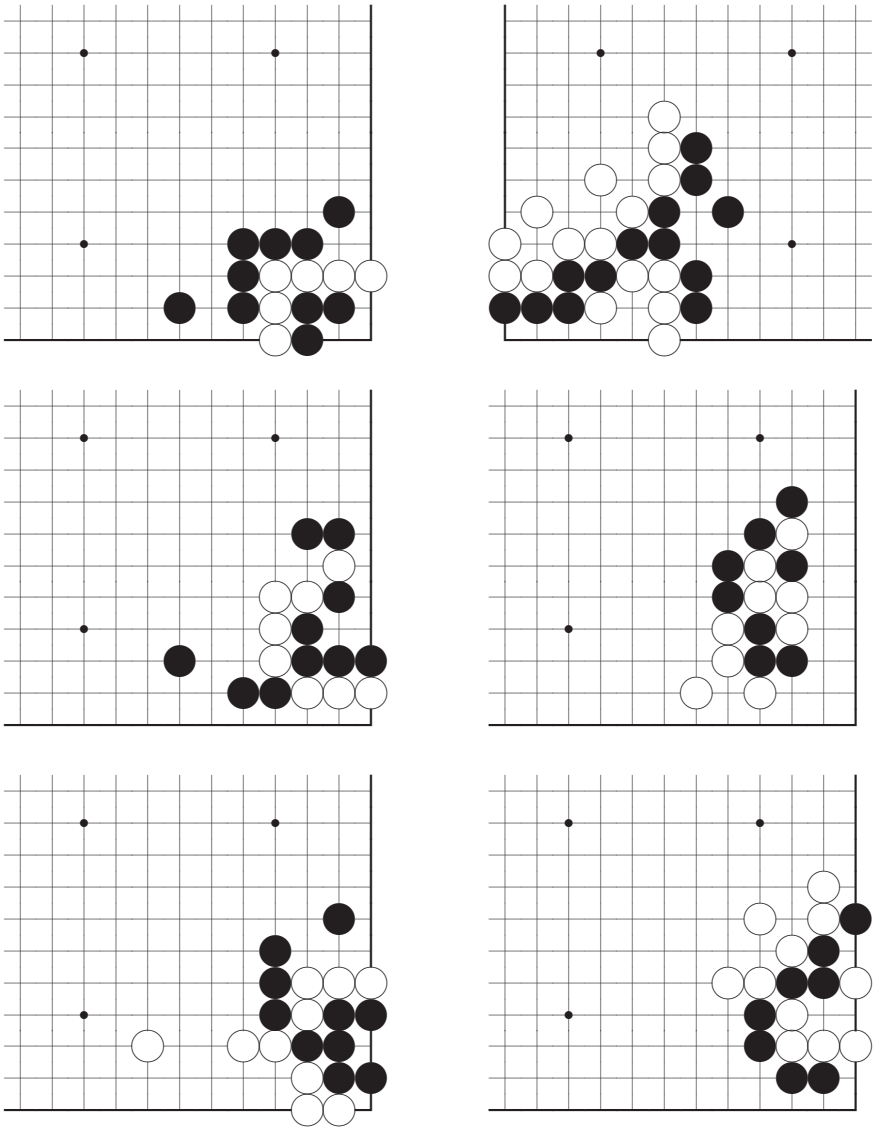


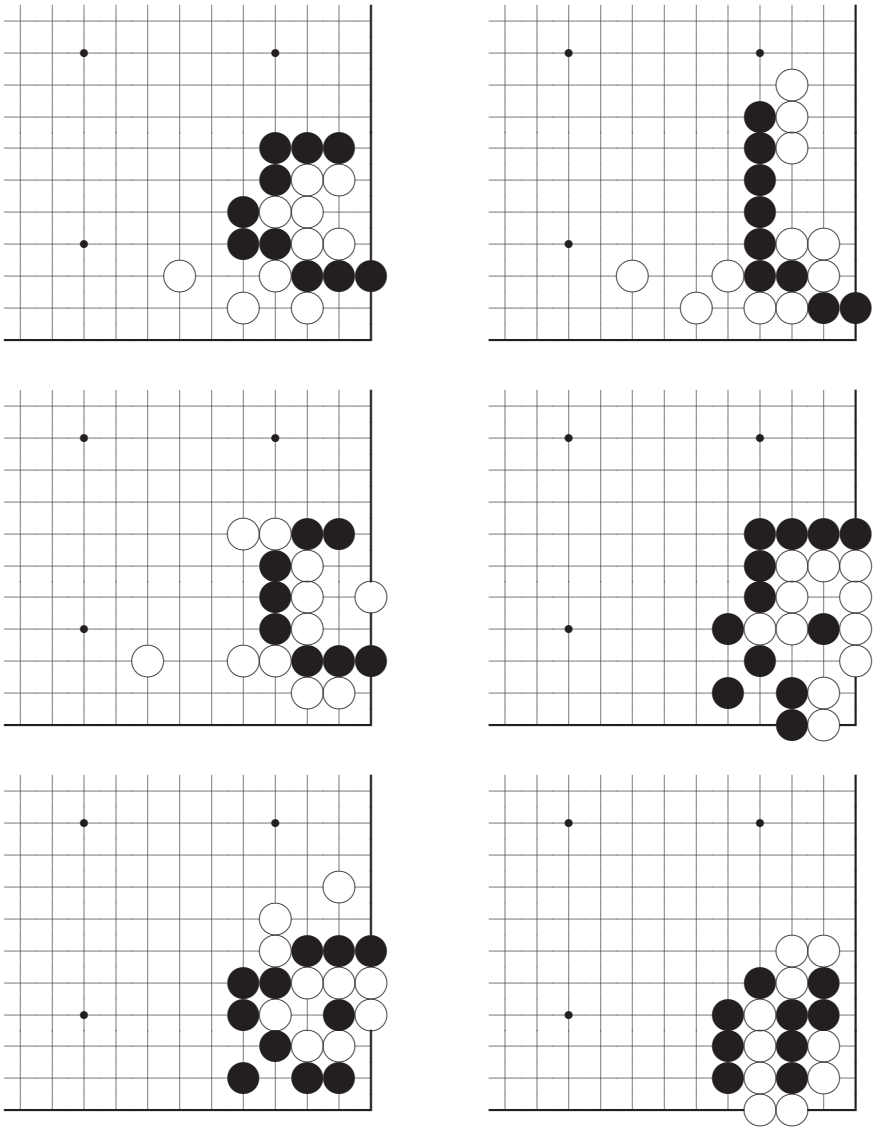


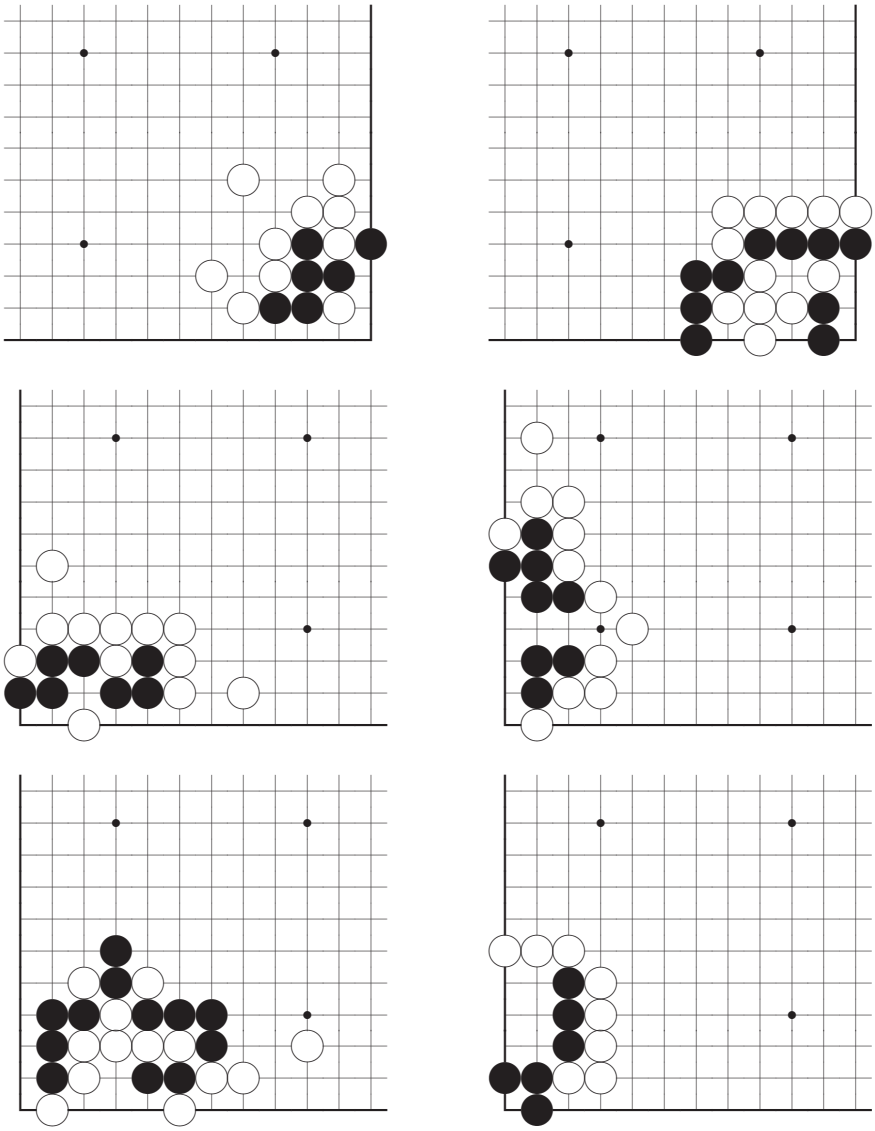

B
A

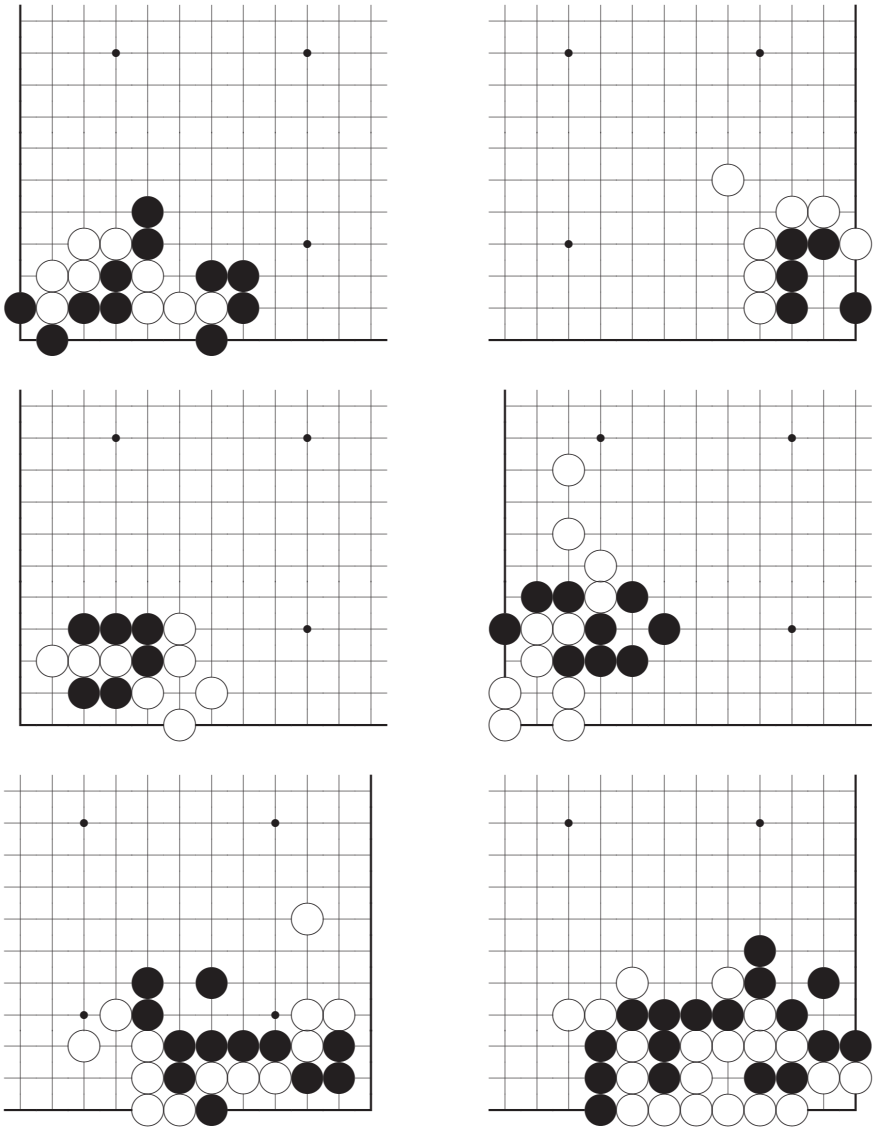

C
B
A

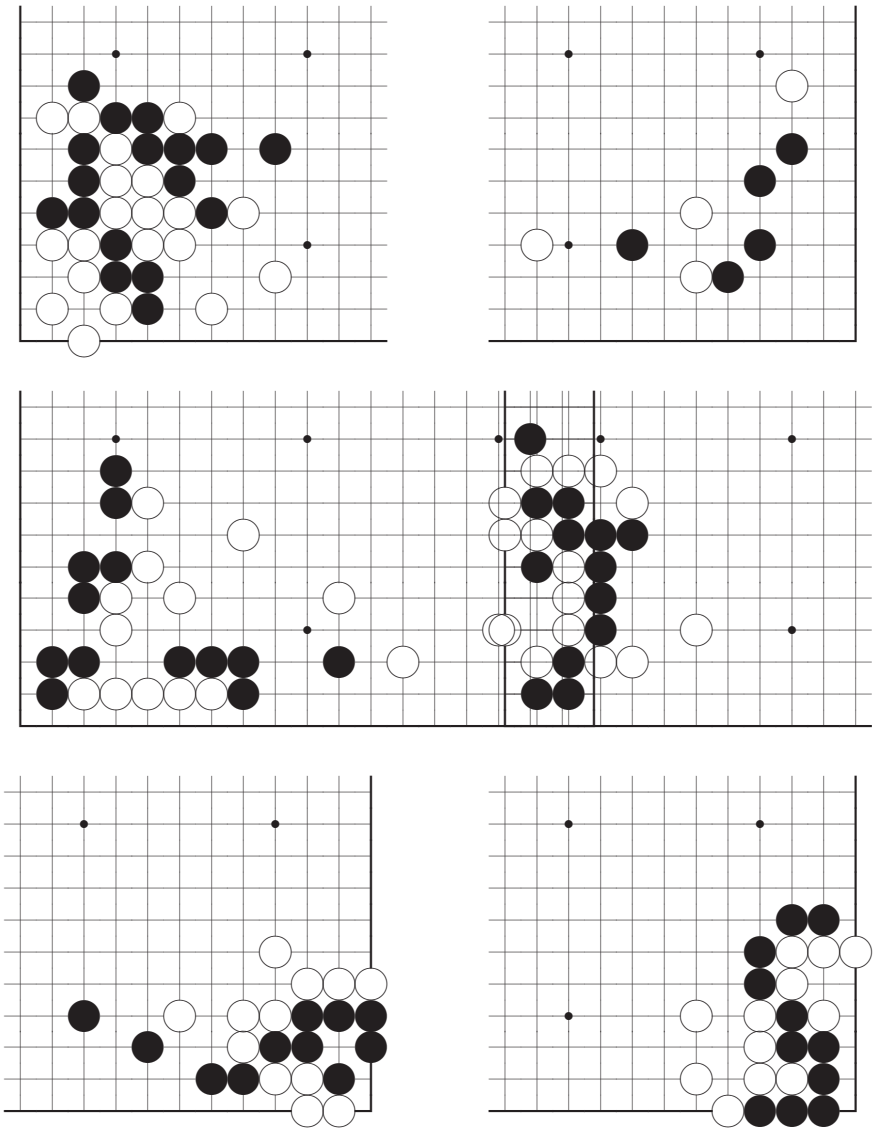

A

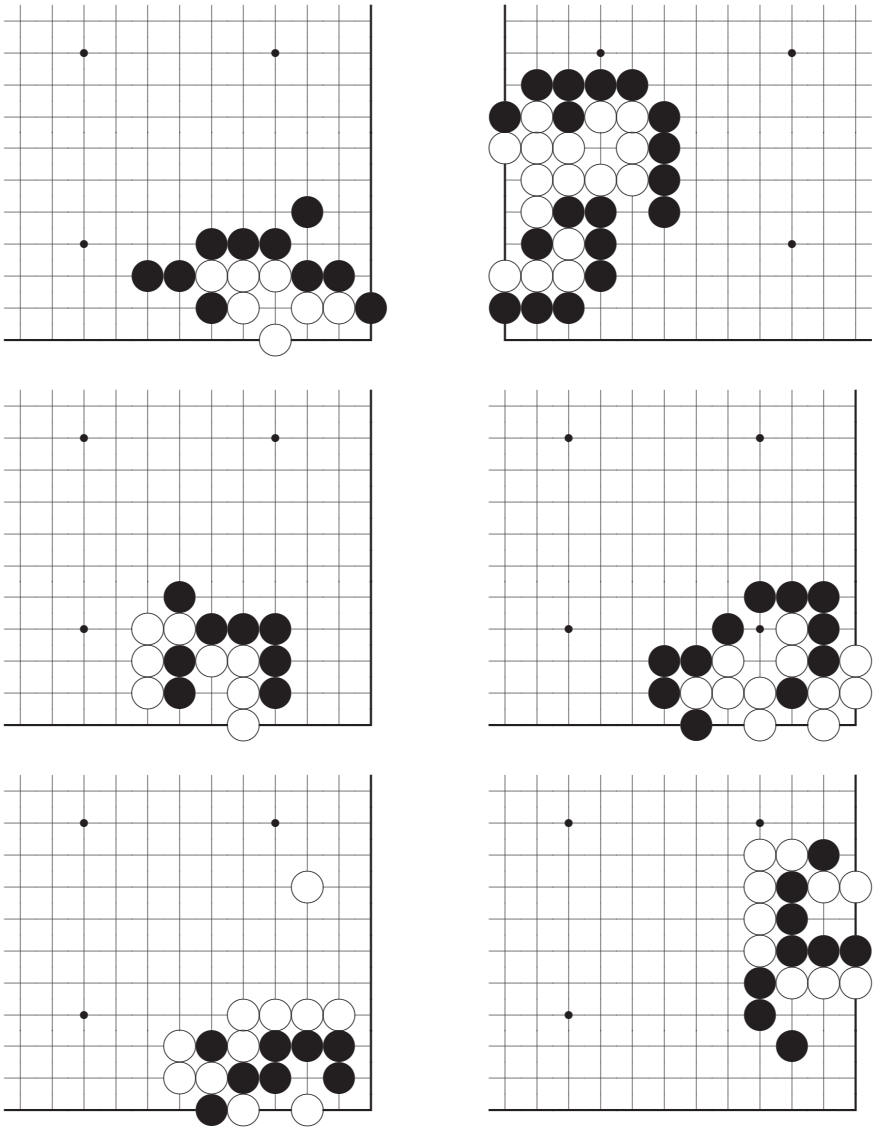


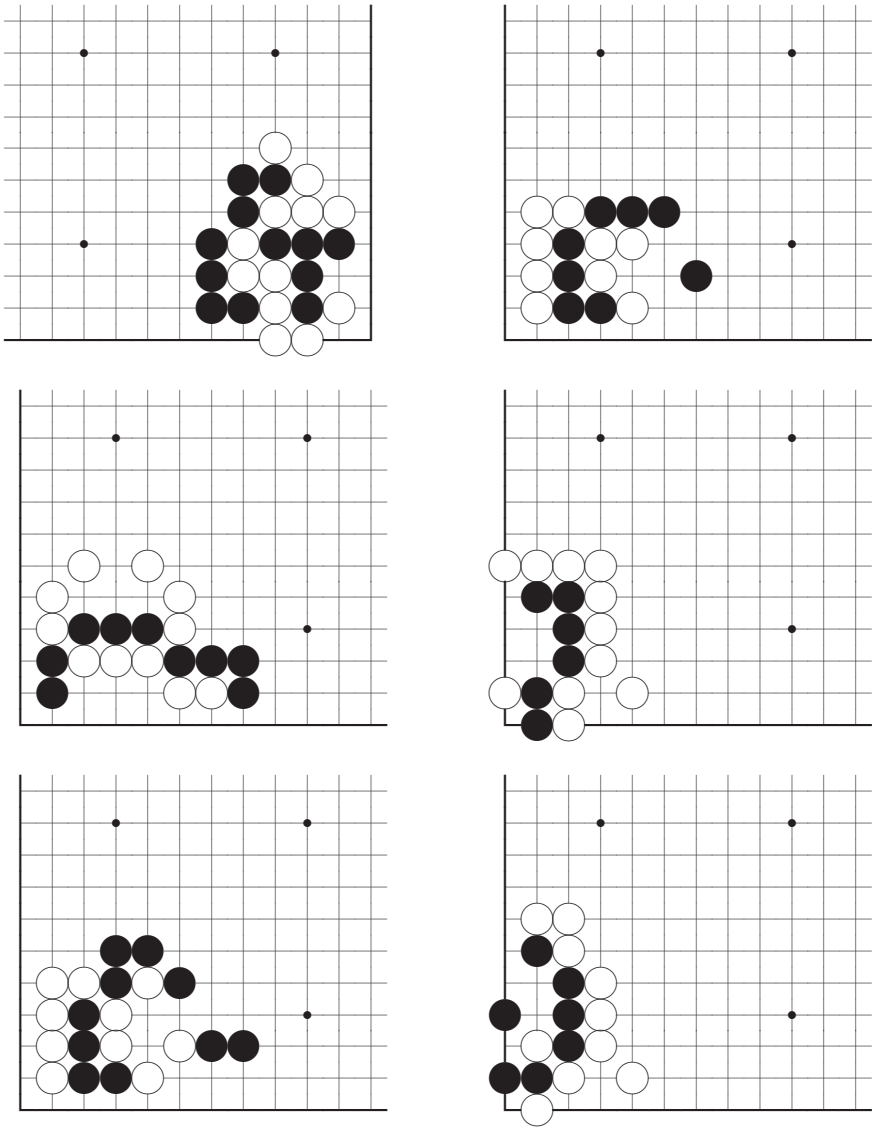


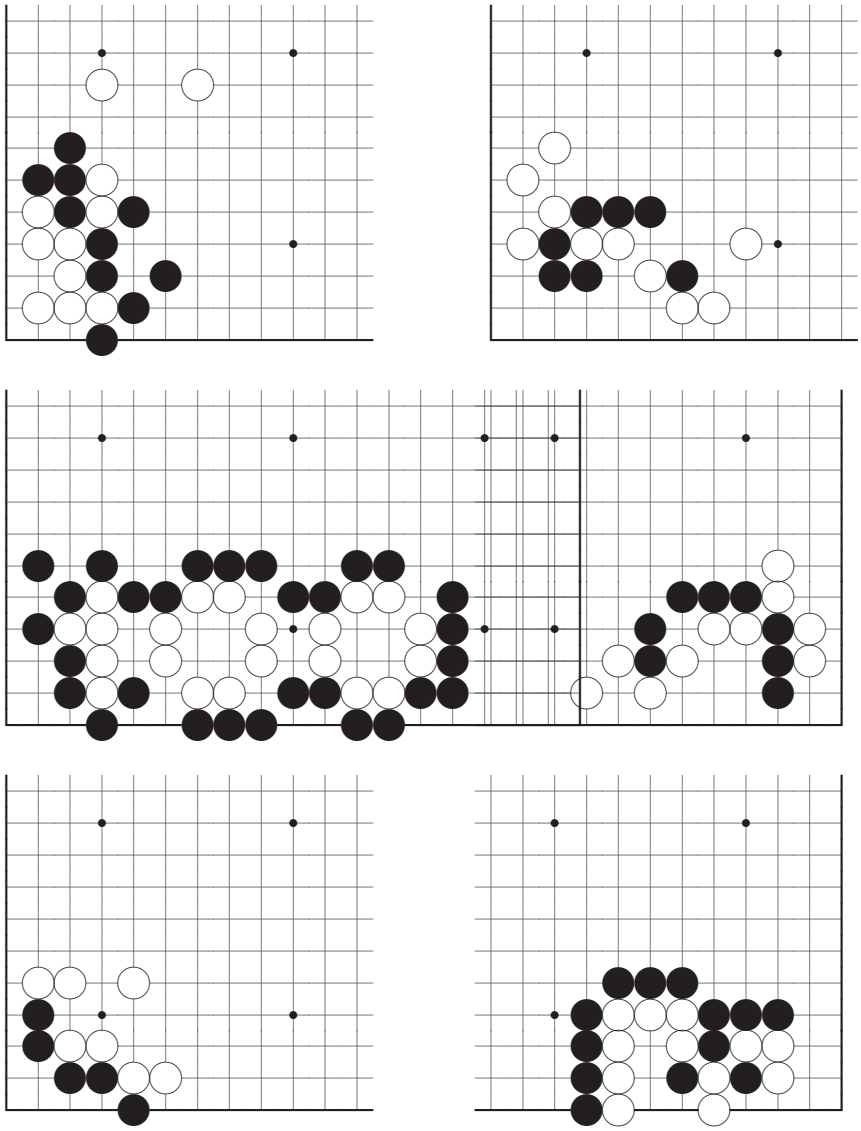


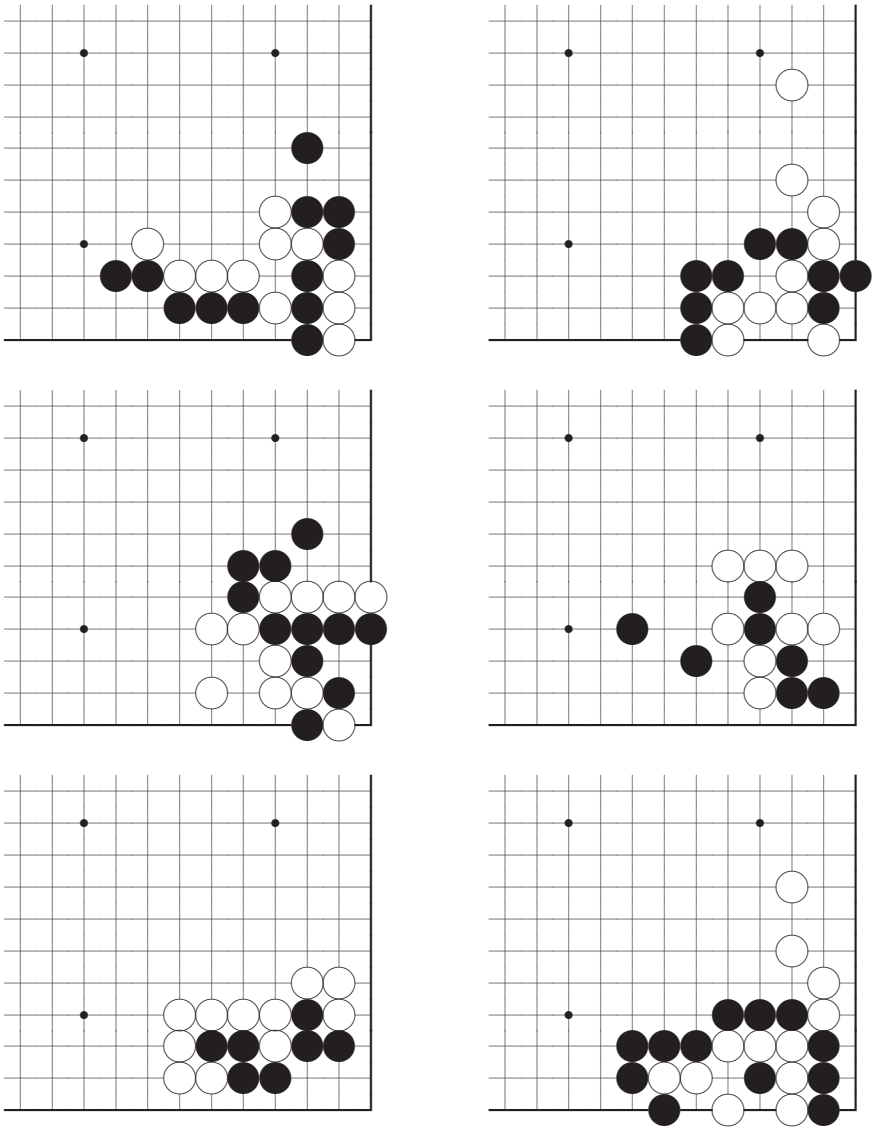


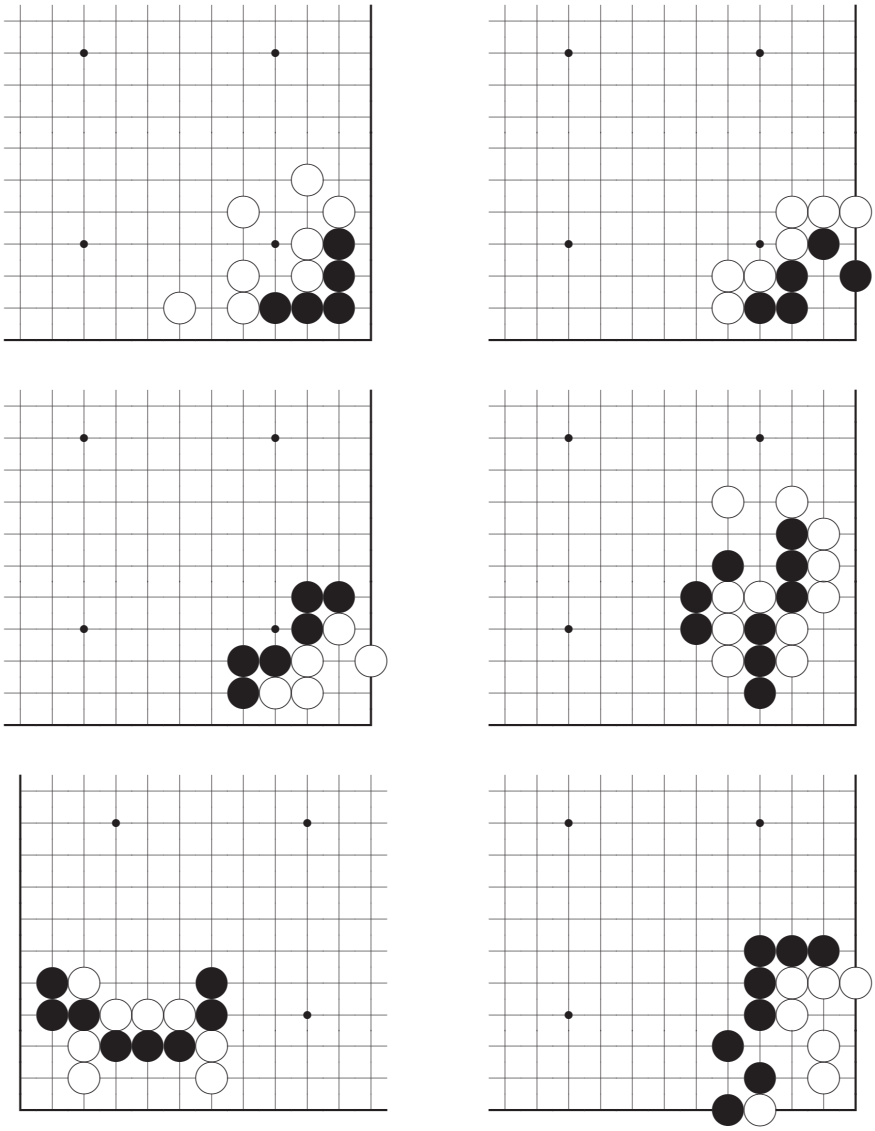


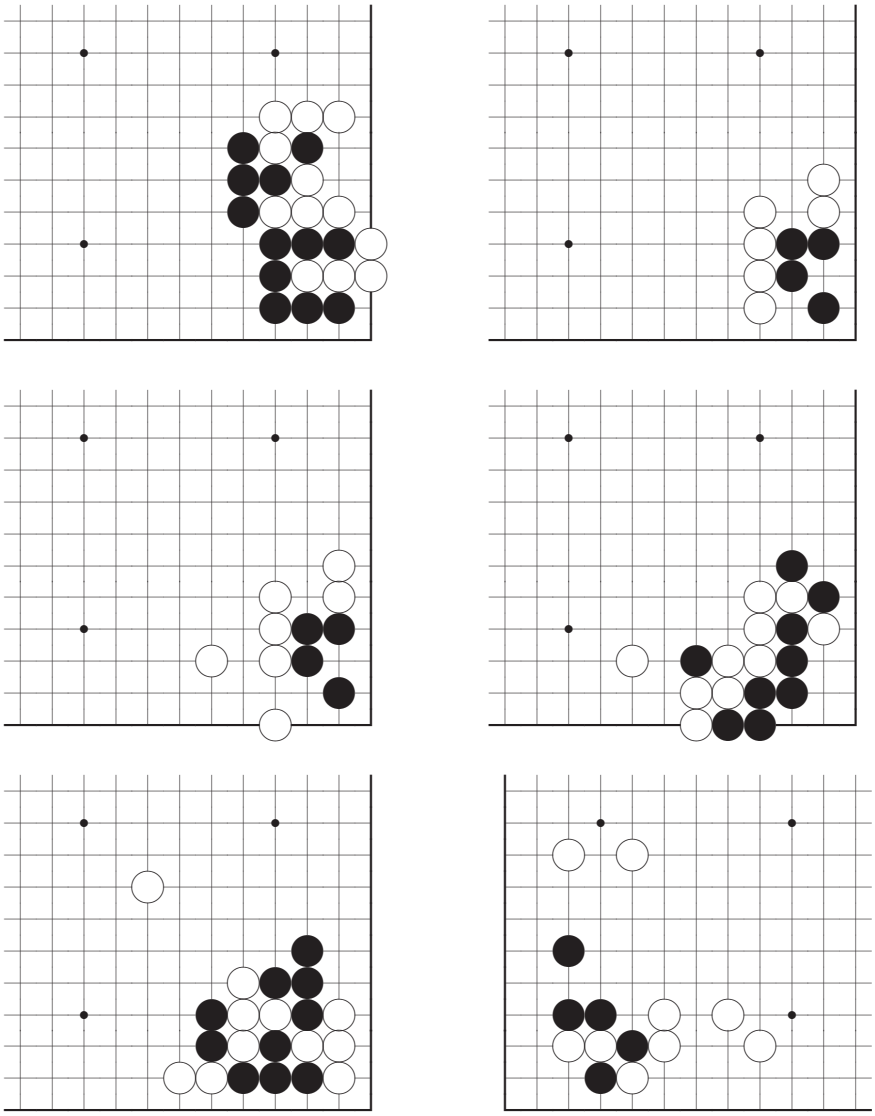


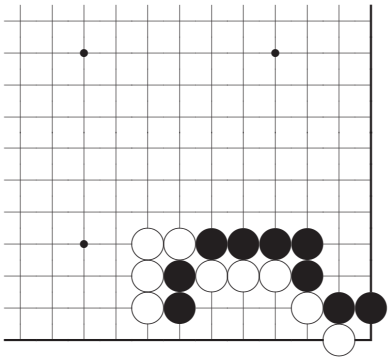


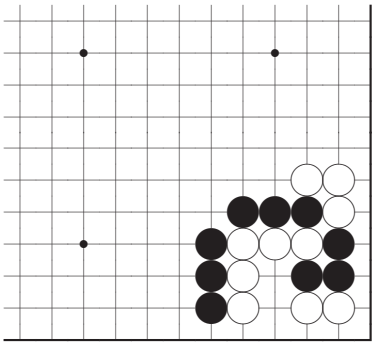


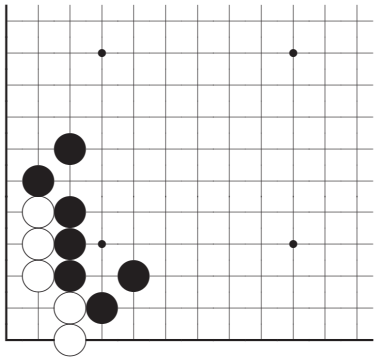


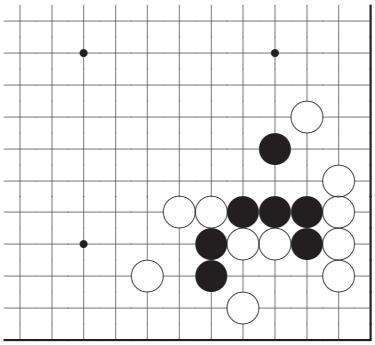


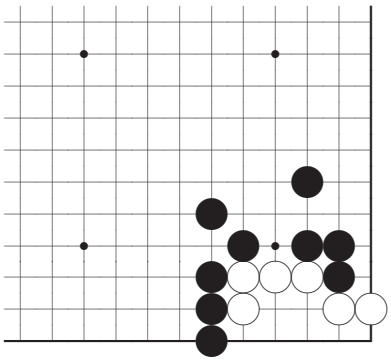


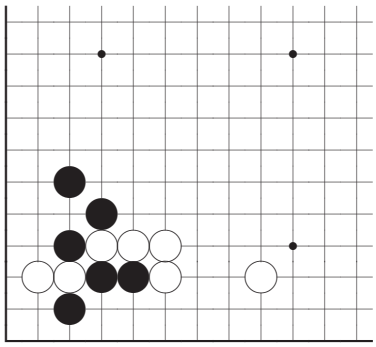


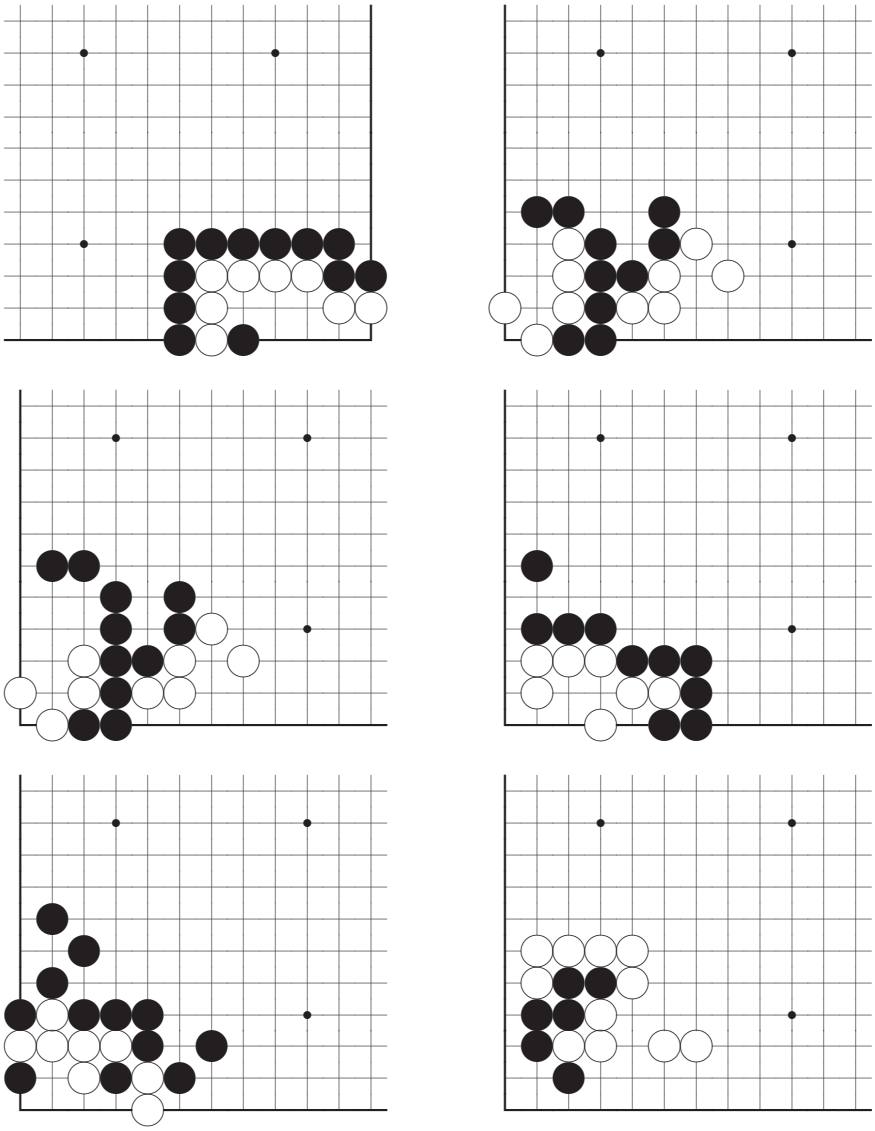


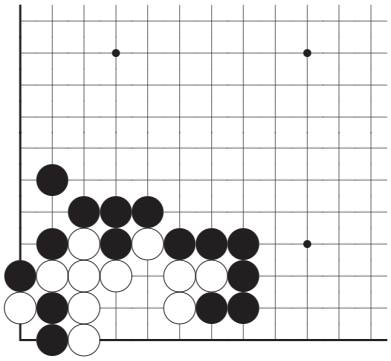


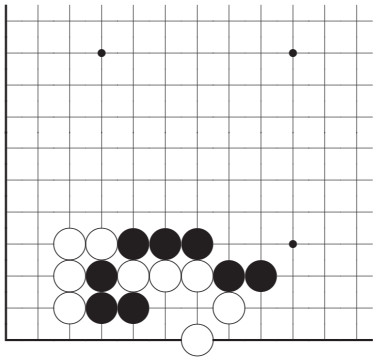


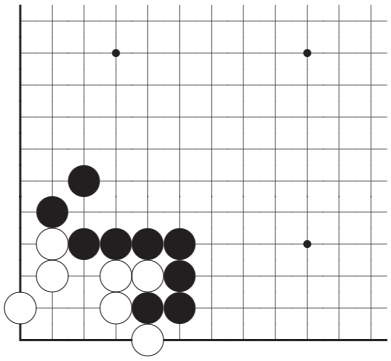


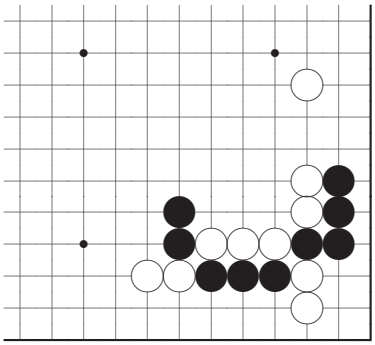


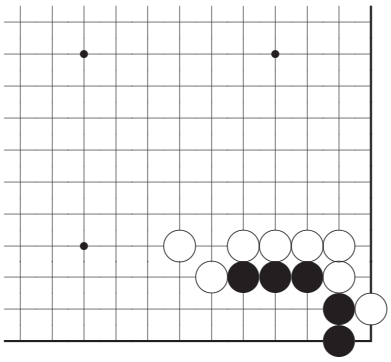


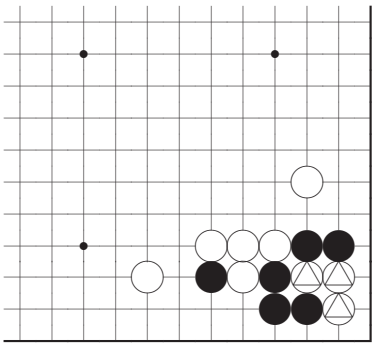


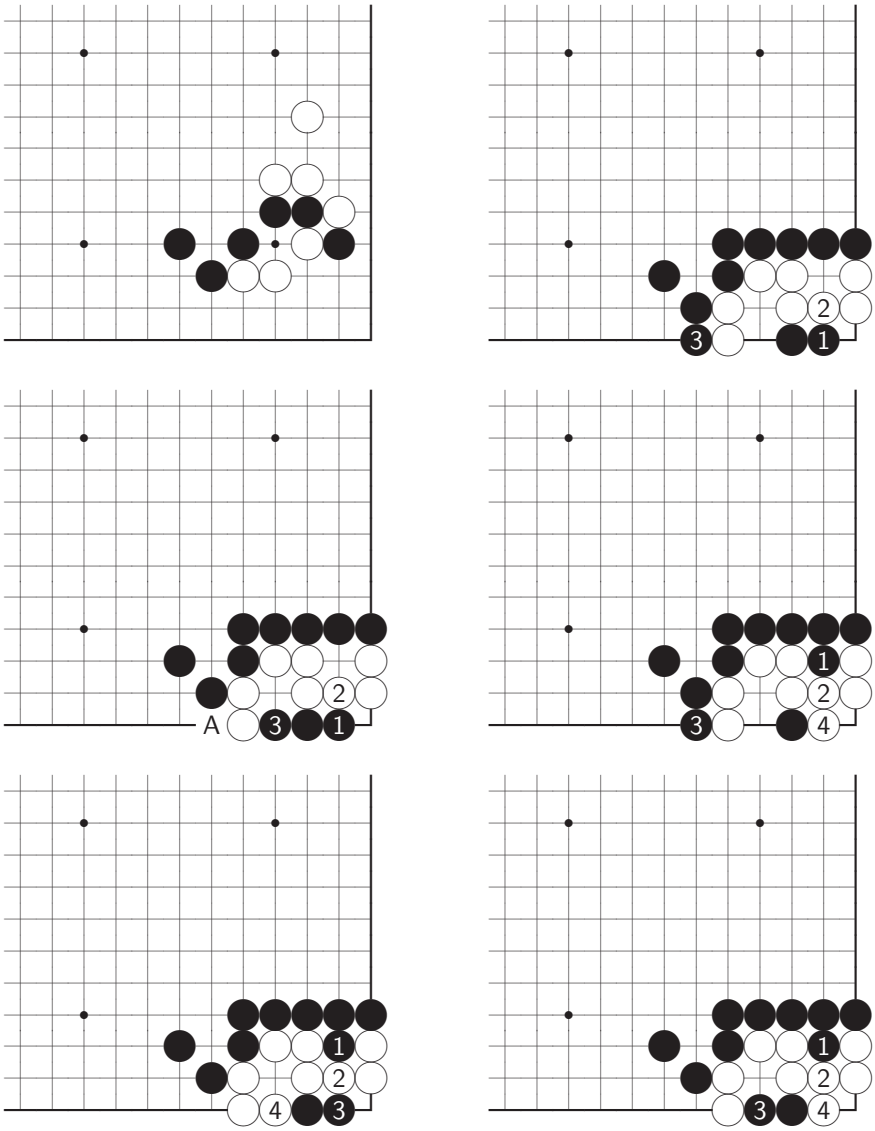


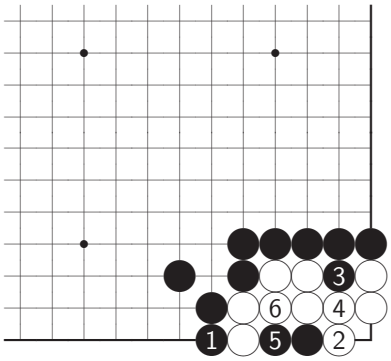


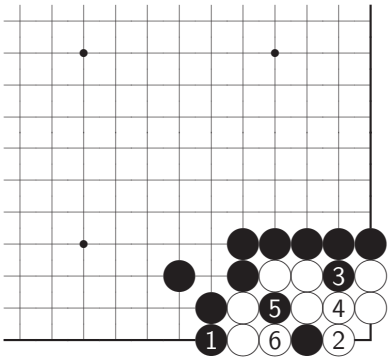


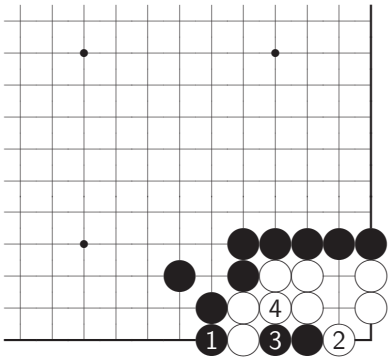


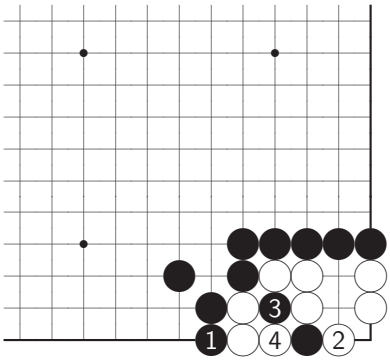


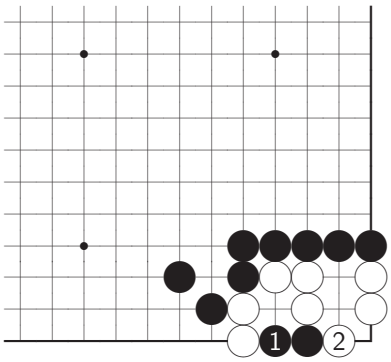

2
3
1
A
3
1
2
1
2
3
4
1
2
4
3
1
2
3
4

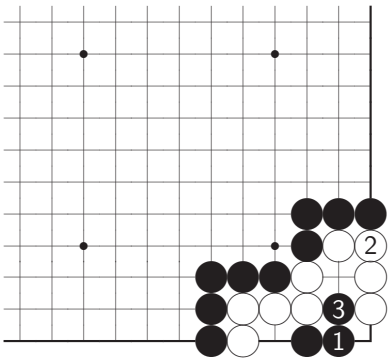

3
6
4
1
5
2

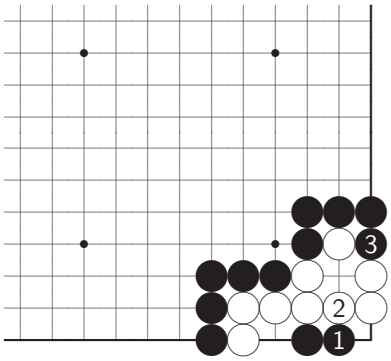

3
5
4
1
6
2

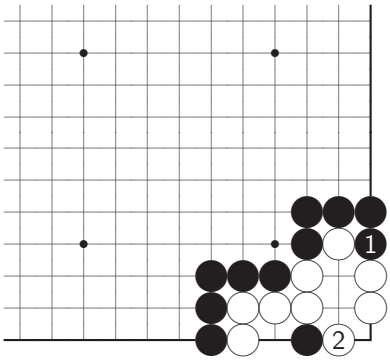

4
1
3
2

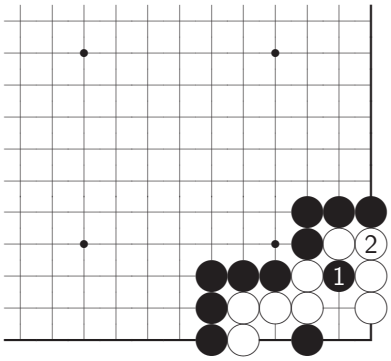

3
1
4
2

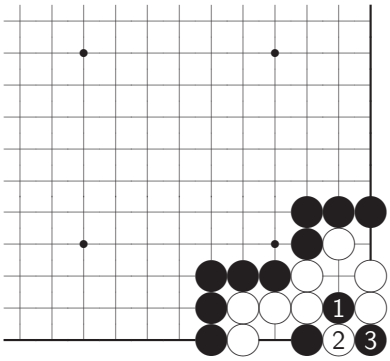

1
2

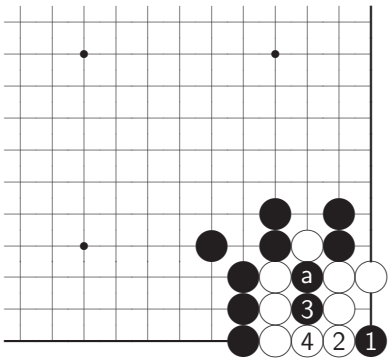

2
3
1

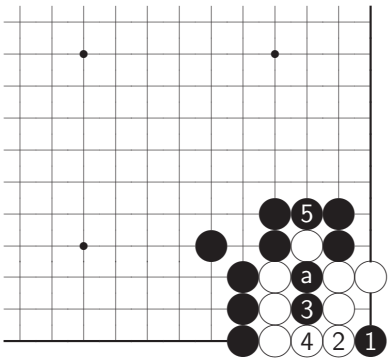

3
2
1

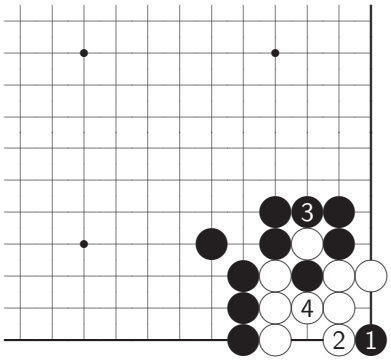

1
2

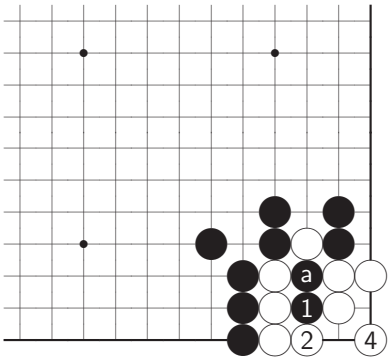

2
1

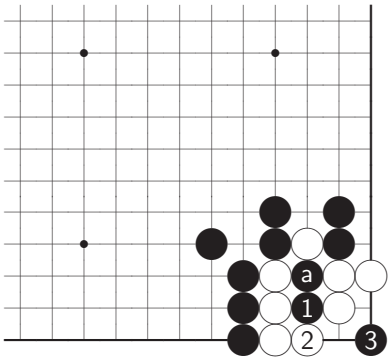

1
2
3

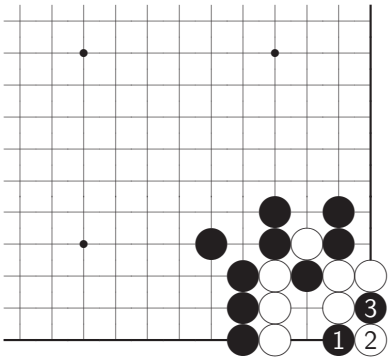

a
3
4
2
1

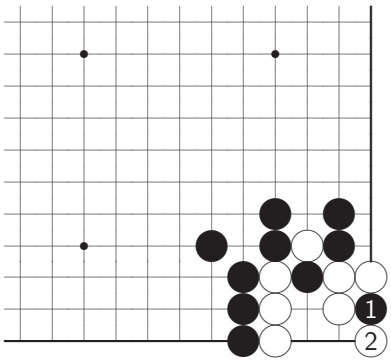

5
a
3
4
2
1

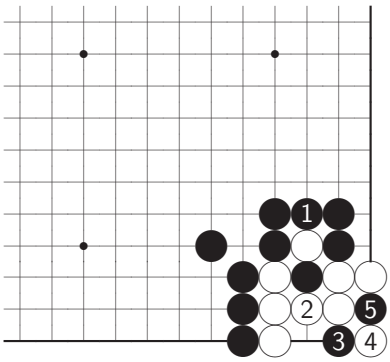

3
4
2
1

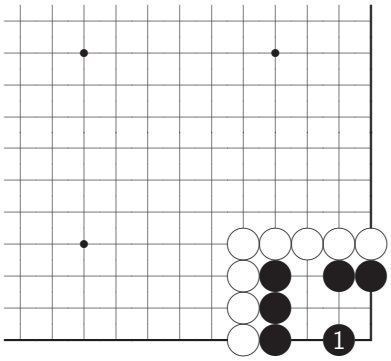

a
1
2
4

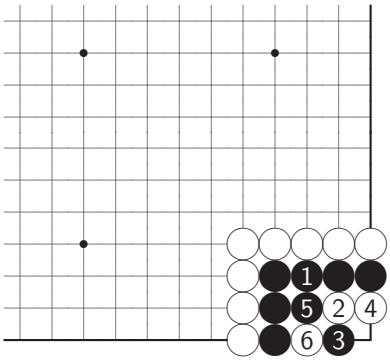

a
1
2
3

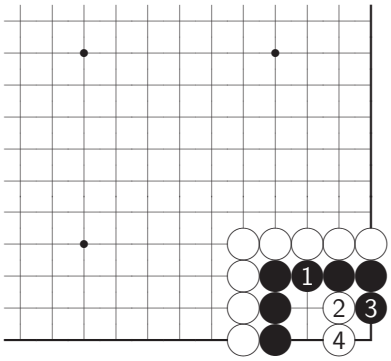

3
1
2

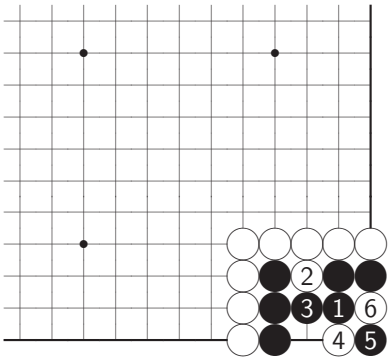

1
2

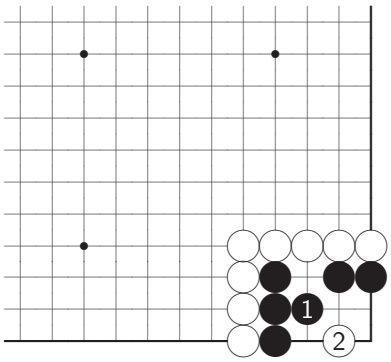

1
2
5
3
4

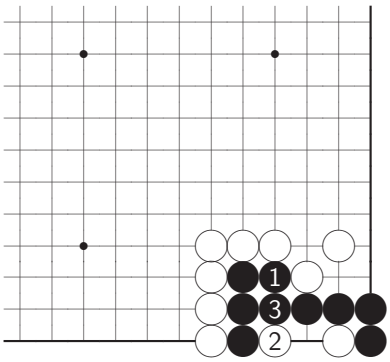

1

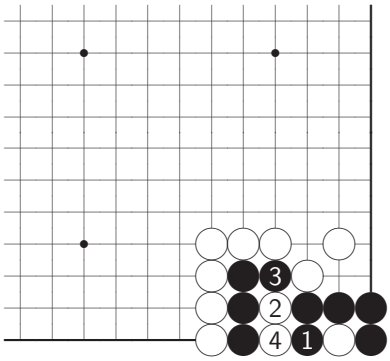

1
5
2
4
6
3

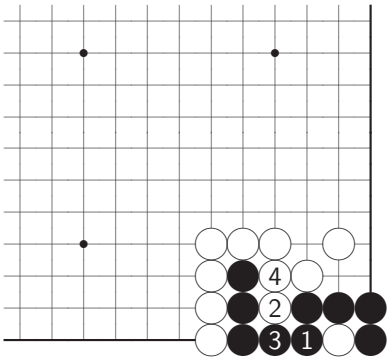

1
2
3
4

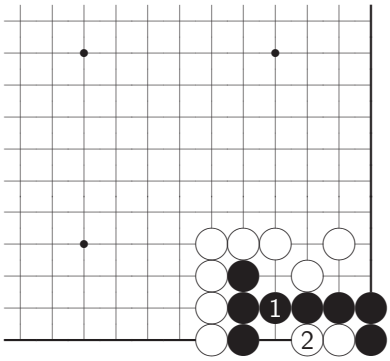

2
3
1
6
4
5

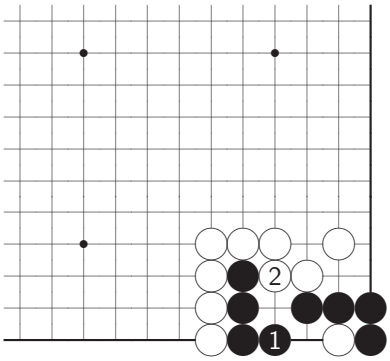

1
2

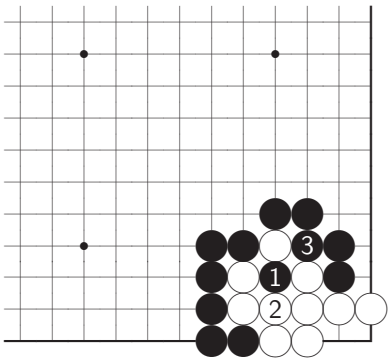

1
3
2

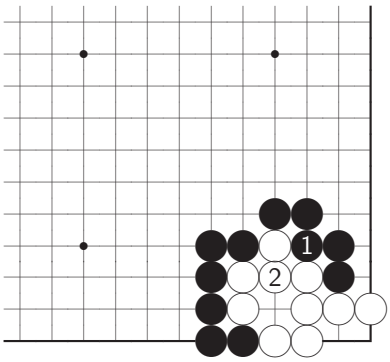

3
2
4
1

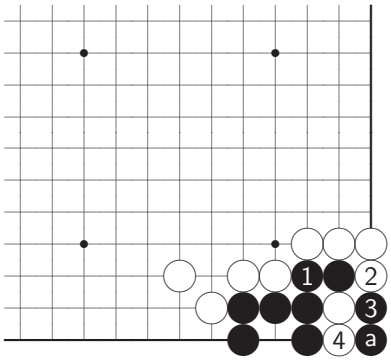

4
2
3
1

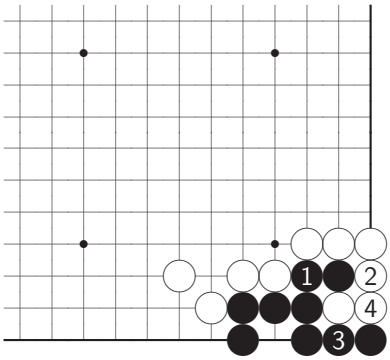

1
2

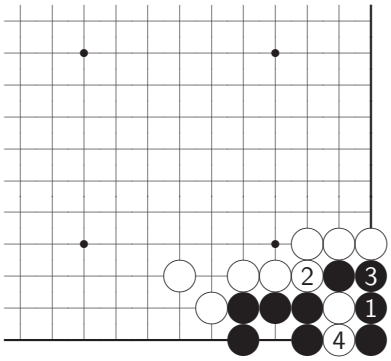

2
1

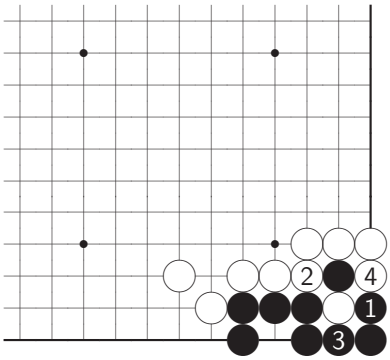

3
1
2

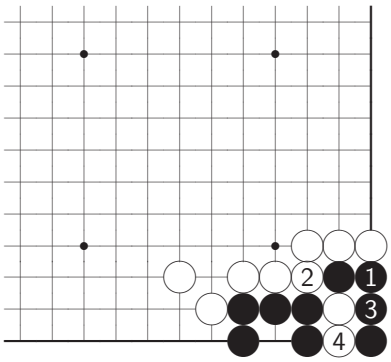

1
2

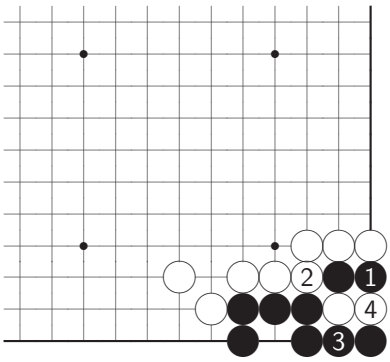

1
2
3
4
a

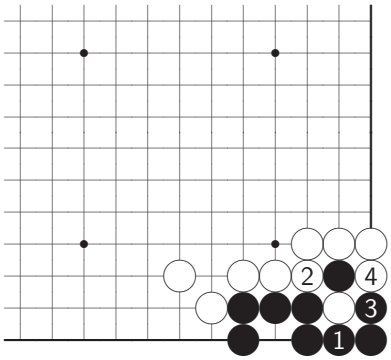

1
2
4
3

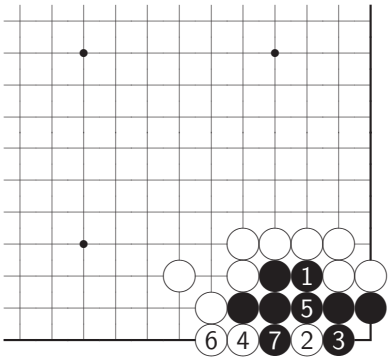

2
3
1
4

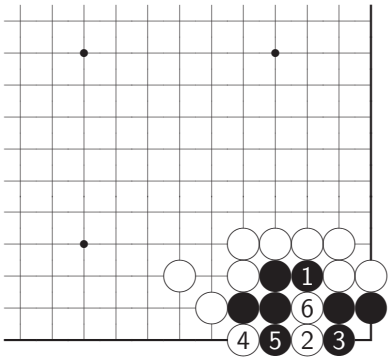

2
4
1
3

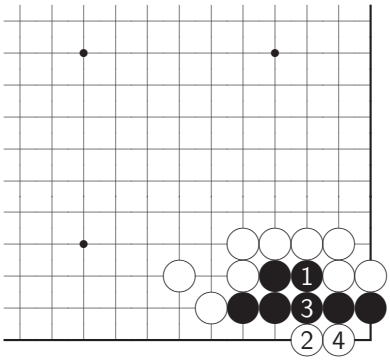

2
1
3
4

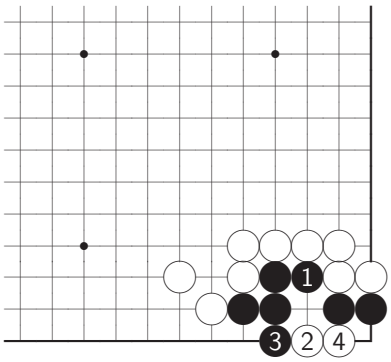

2
1
4
3

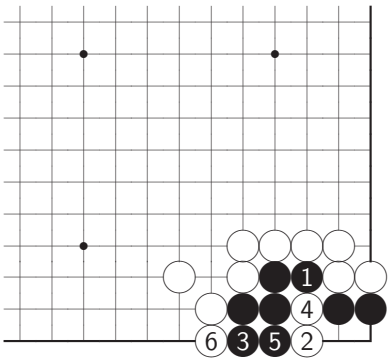

2 4
3
1

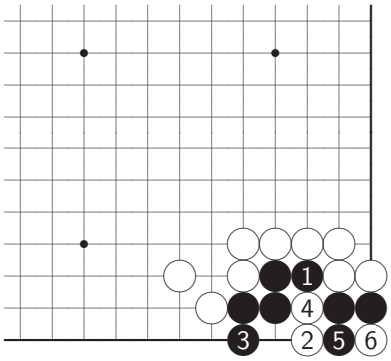

1
5
6 4 7 2 3

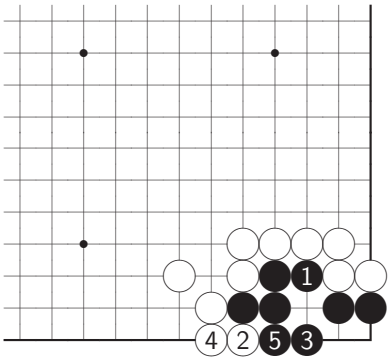

1
6
4 5 2 3

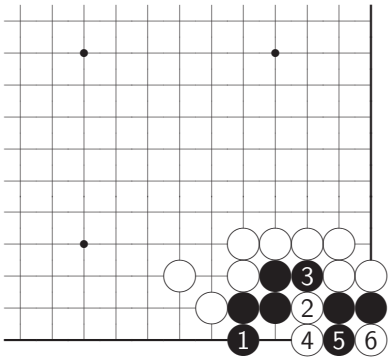

1
3
2 4

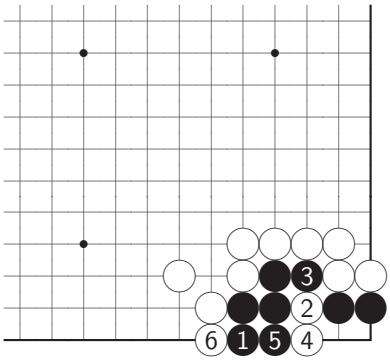

1
3 2 4

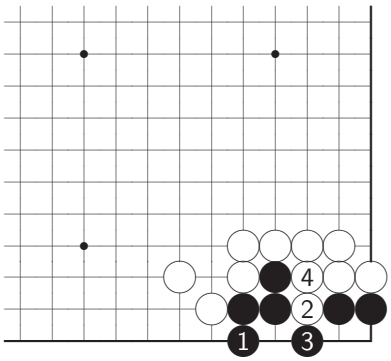

1
4
6 3 5 2

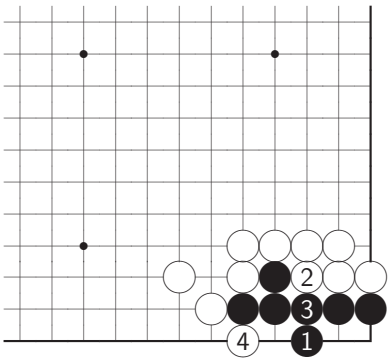

1
4
3
2
5
6

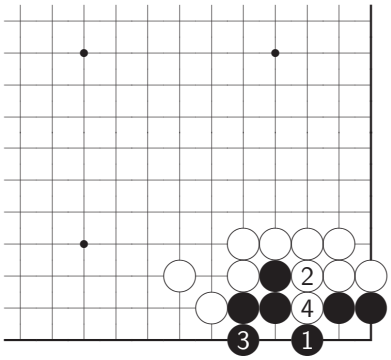

1
4
2
5
3

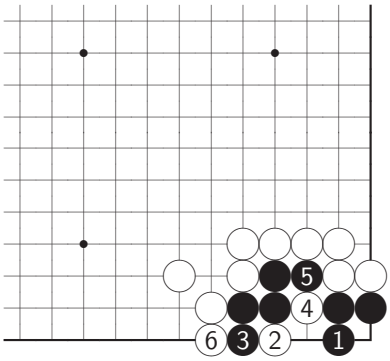

3
2
1
4
5
6

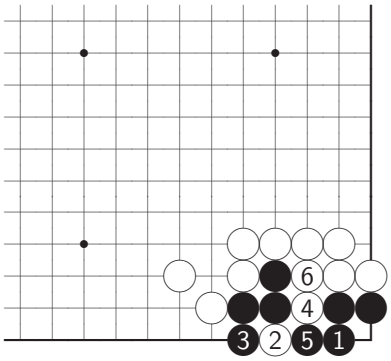

3
2
6
1
5
4

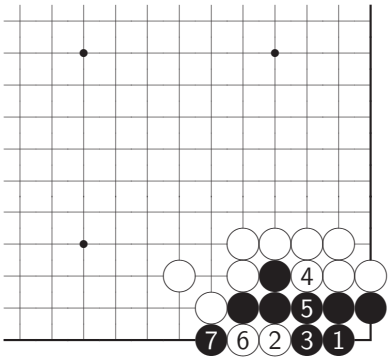

4
2
1
3

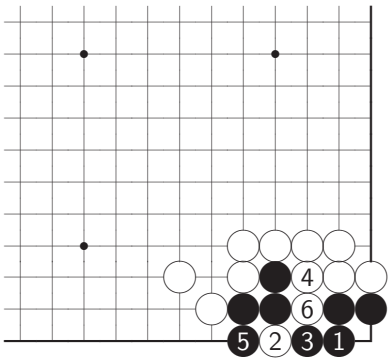

2
3
4
1

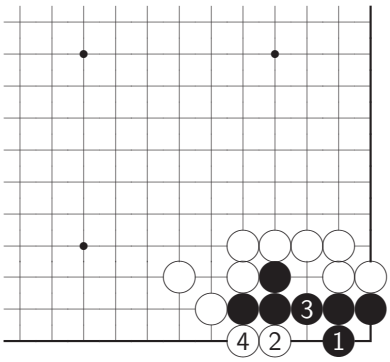

2
4
3 1

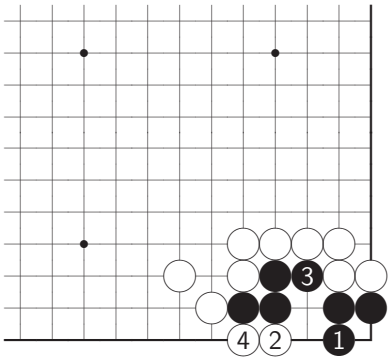

5
4
6 3 2 1

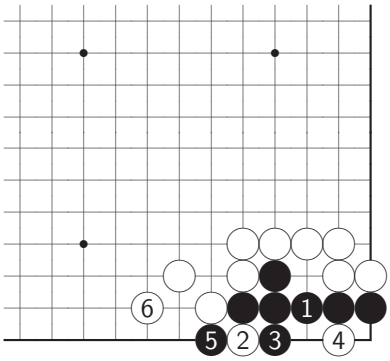

6
4
3 2 5 1

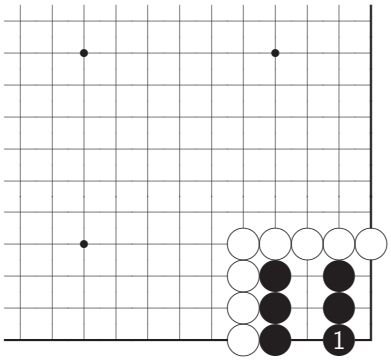

4
5
7 6 2 3 1

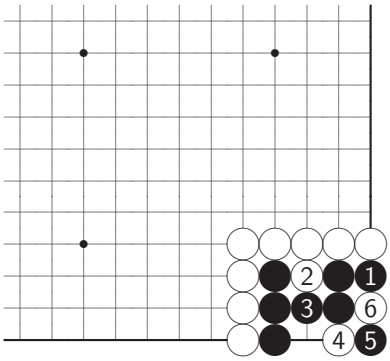

4
6
5 2 3 1

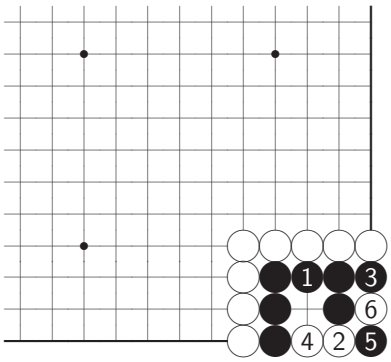

3
4 2 1

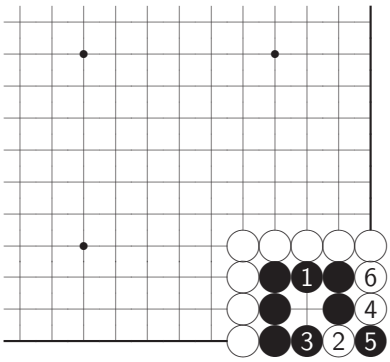

3
4 2 1

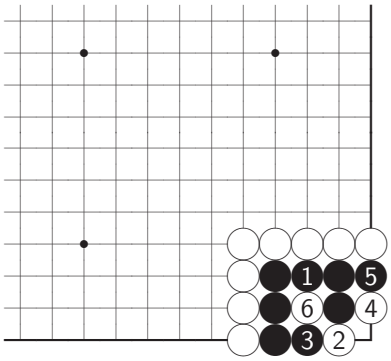

6
1
5 2 3 4

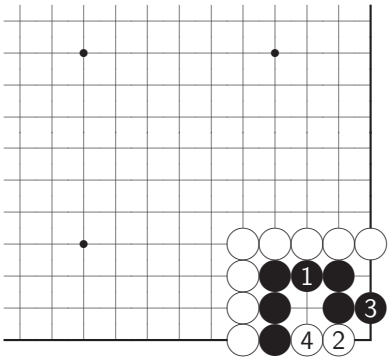

1

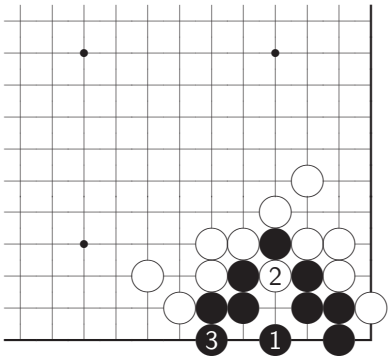

2 1
3 6
4 5

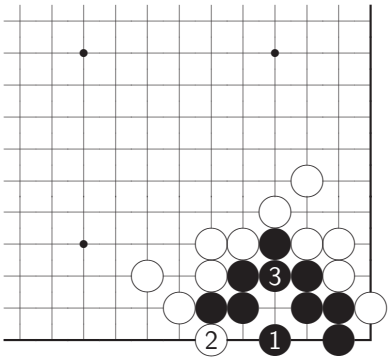

1 3
6
4 2 5

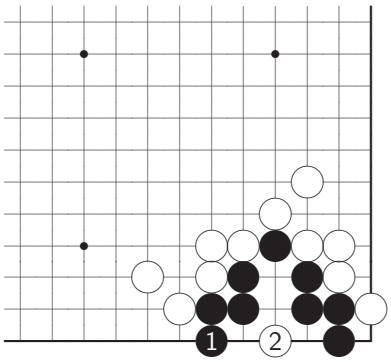

1 6
4
3 2 5

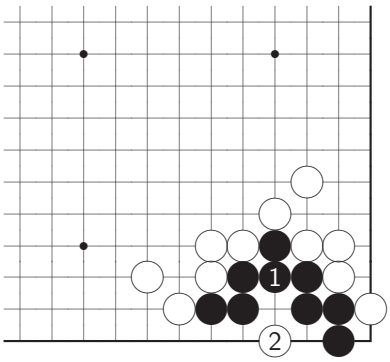

1
5
6
4
3
2

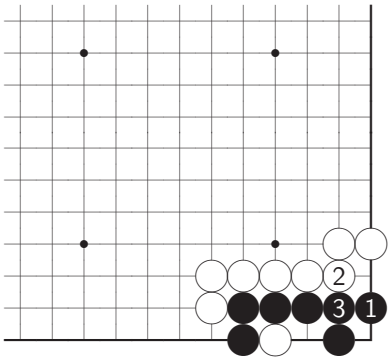

1
3
4
2

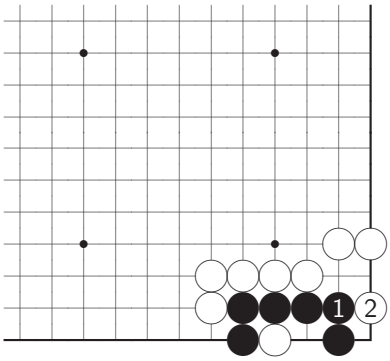

2
3
1

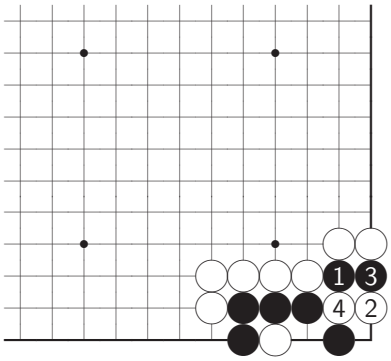

3
2
1

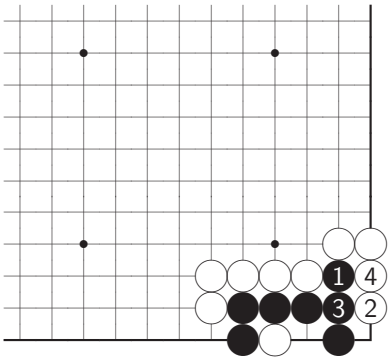

1
2

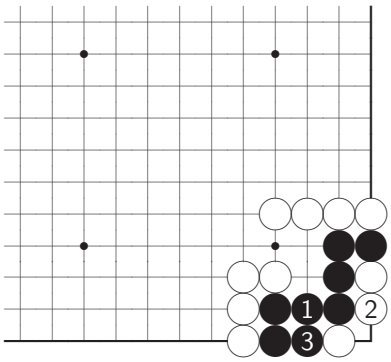

1
2

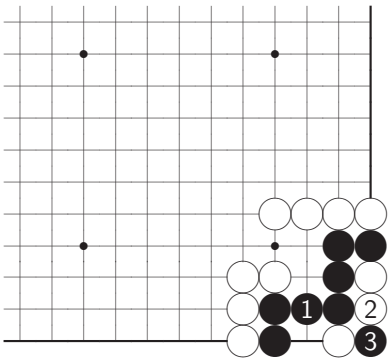

2
3 1

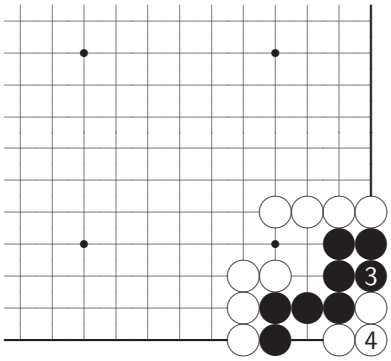

1 2

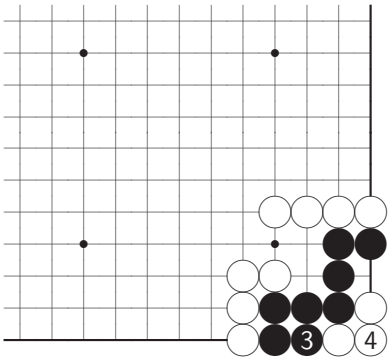

1 3
4 2

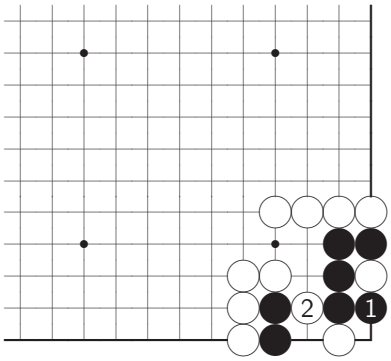

1 4
3 2

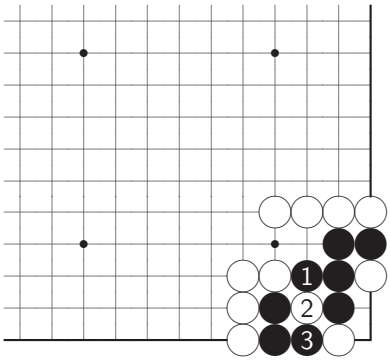

1 2
3

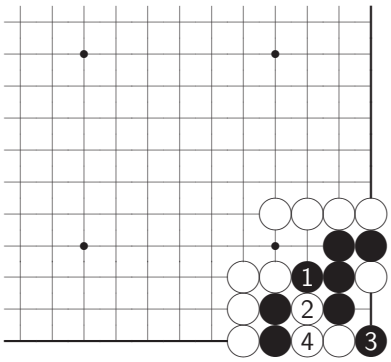

1 2
3

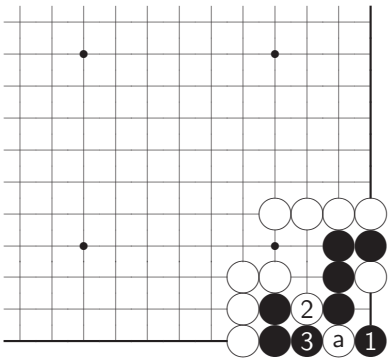

3
4

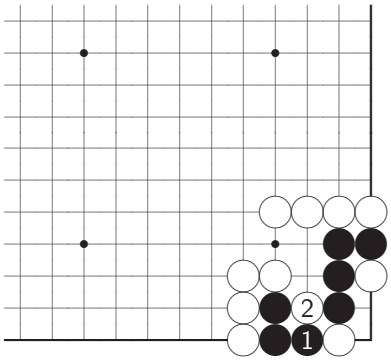

3
4

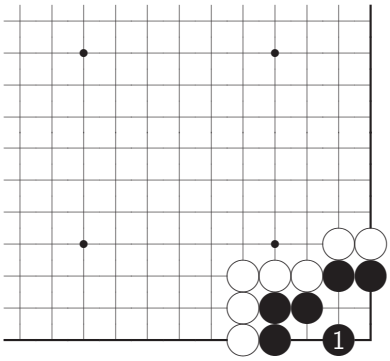

2
1

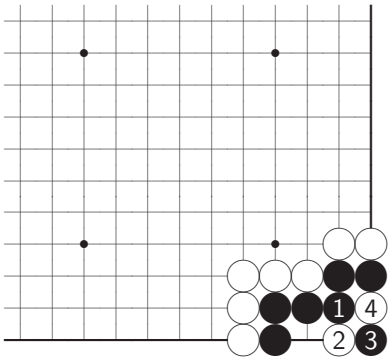

1
2
3

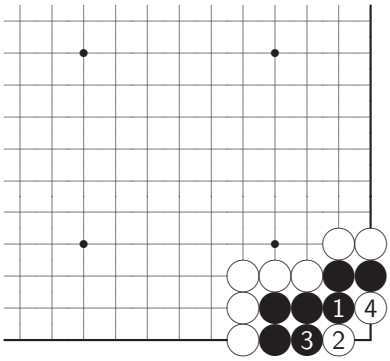

1
2
4
3

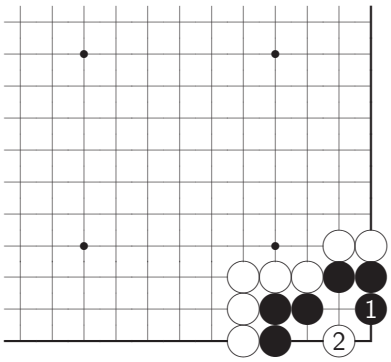

2
3
a
1

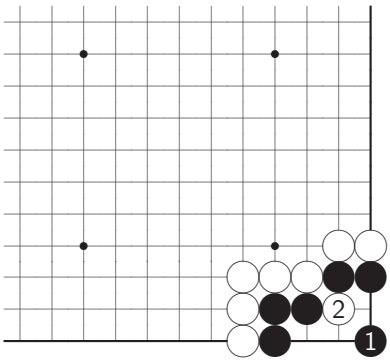

2
1

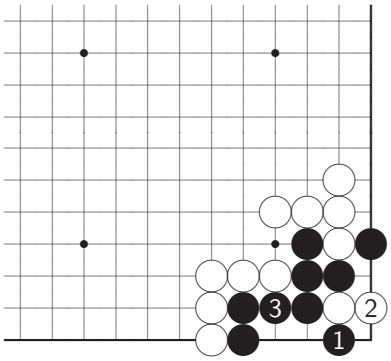

1

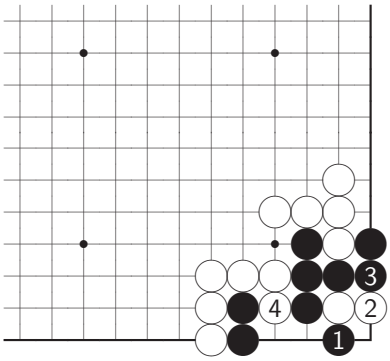

1
4
2
3

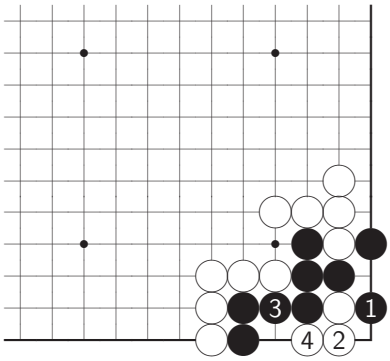

1
4
3
2

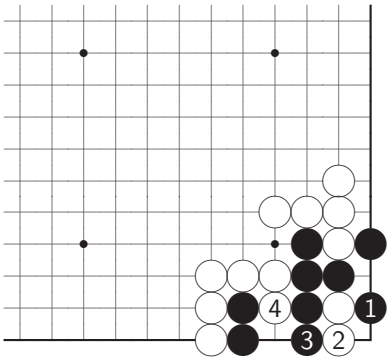

1
2

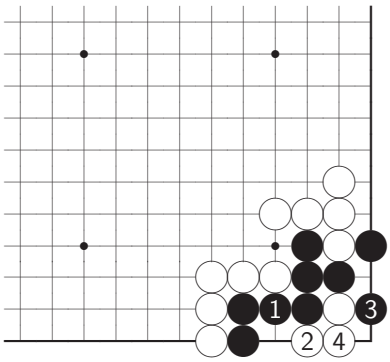

2
1

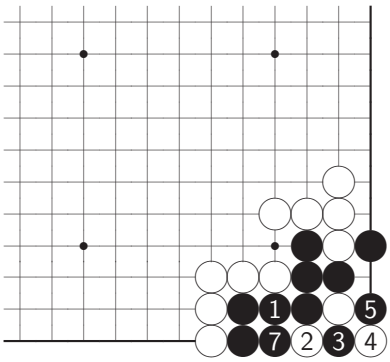

3
2
1

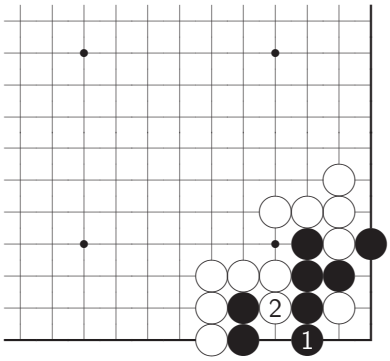

3
4
2
1

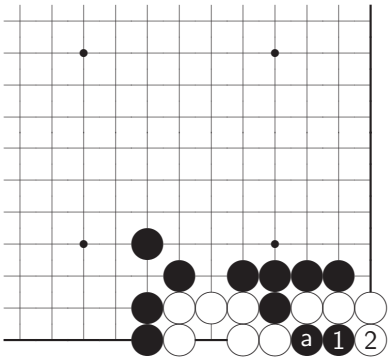

3
1
4
2

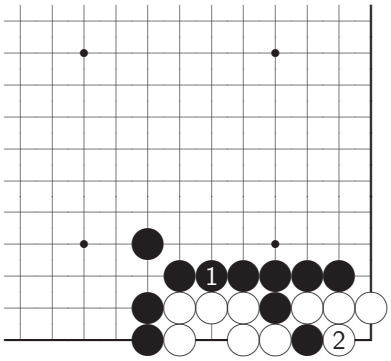

4
1
3
2

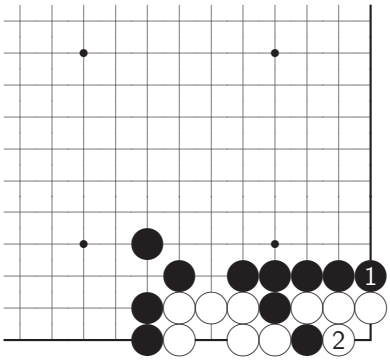

1
3
2
4

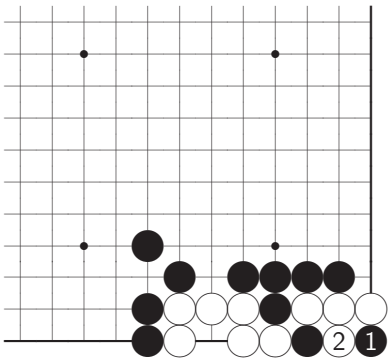

1
5
7
2
3
4

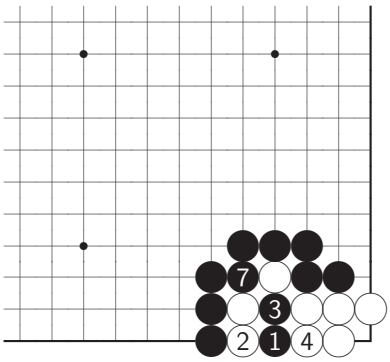

2
1

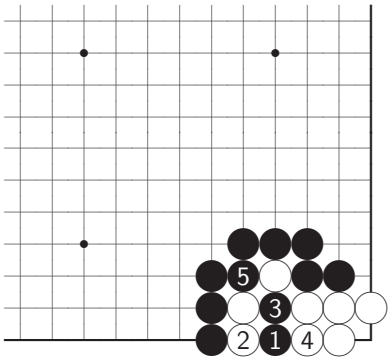

a
1
2

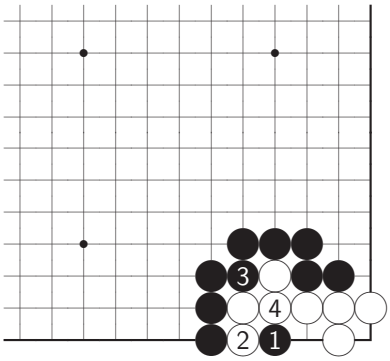

1
2

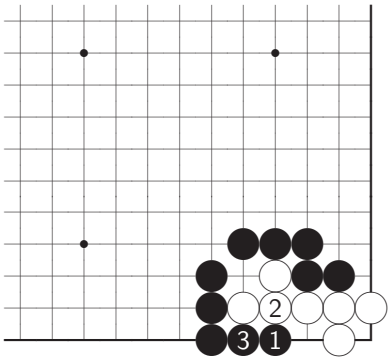

1
2

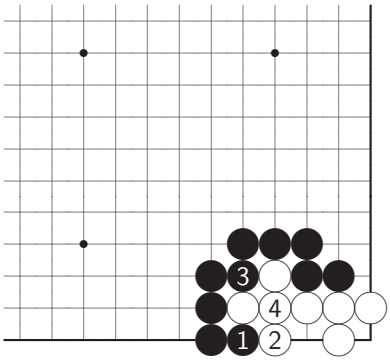

2
1

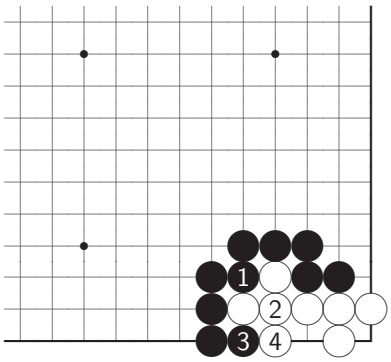

7
3
2
1
4

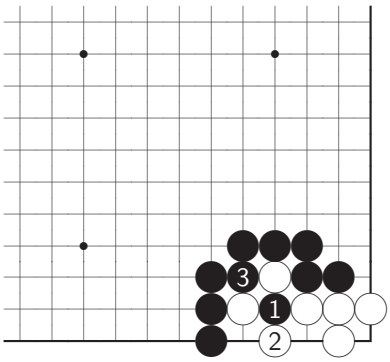

5
3
2 1 4

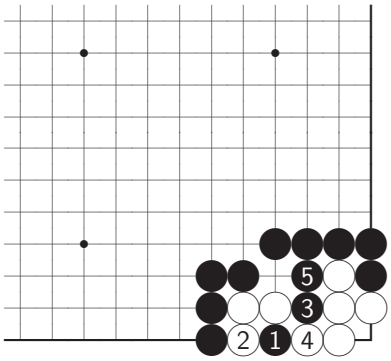

3
4
2 1

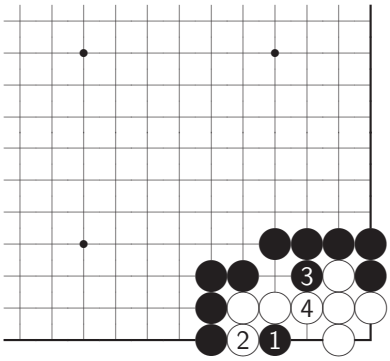

2
3 1

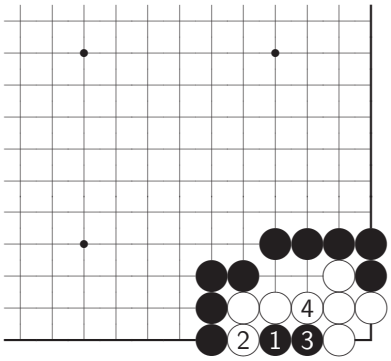

3
4
1 2

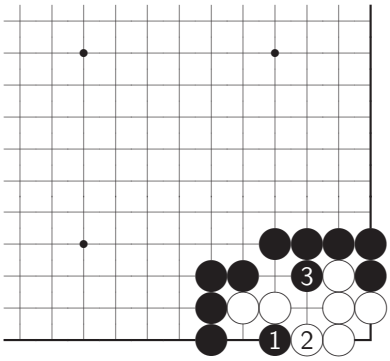

1
2
3 4

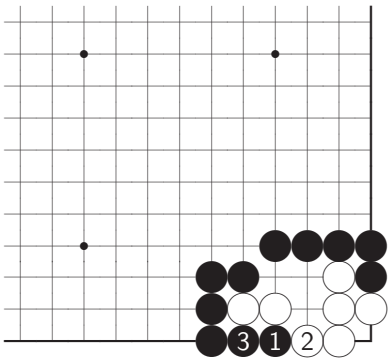

3
1
2

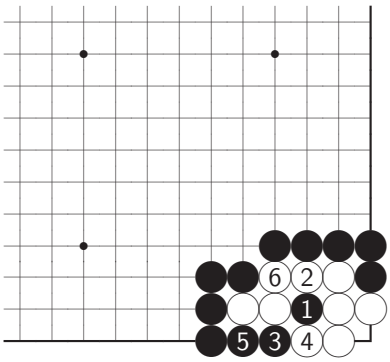

5
3
2 1 4

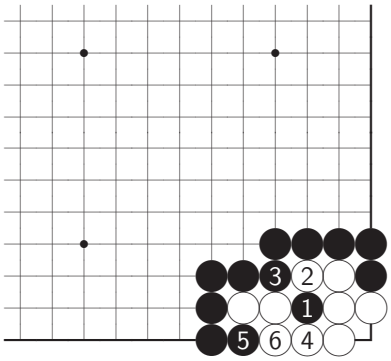

3
4
2 1

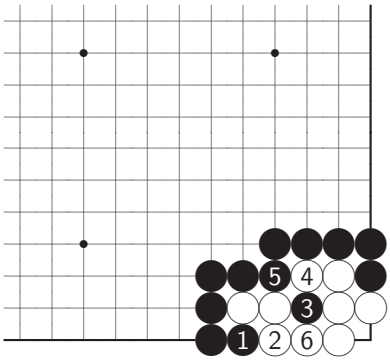

4
2 1 3

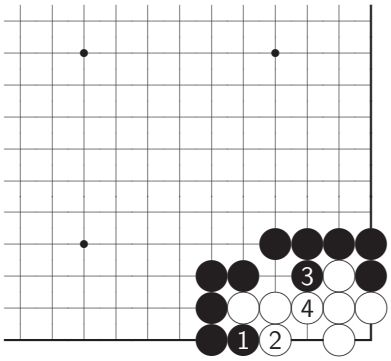

3
1 2

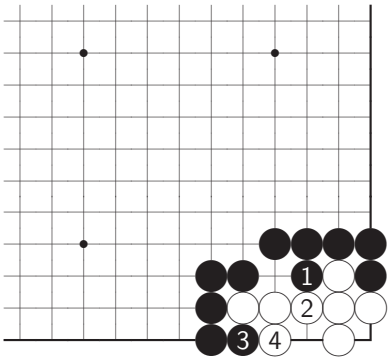

3 1 2

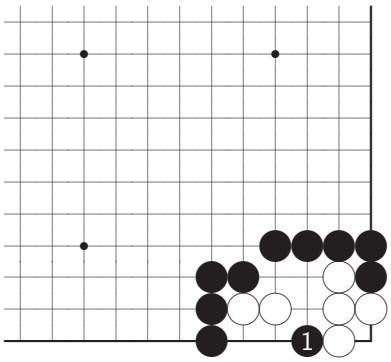

6 2
1
5 3 4

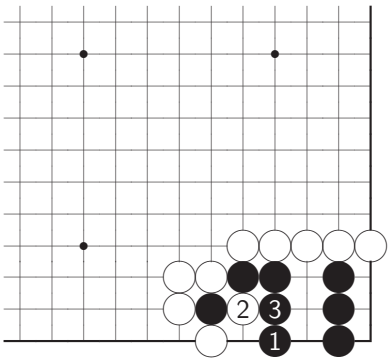

3 2
1
5 6 4

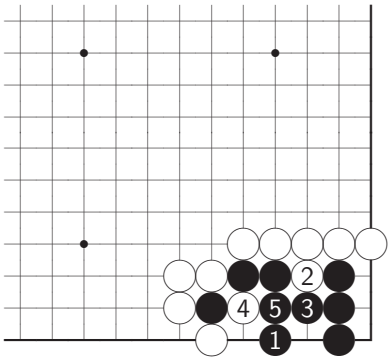

5 4
3
1 2 6

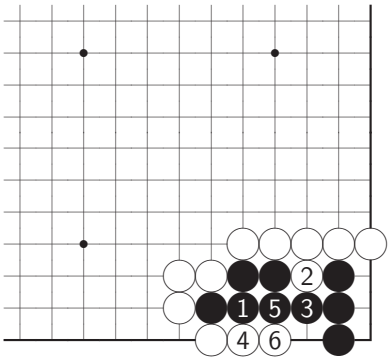

3
4
1 2

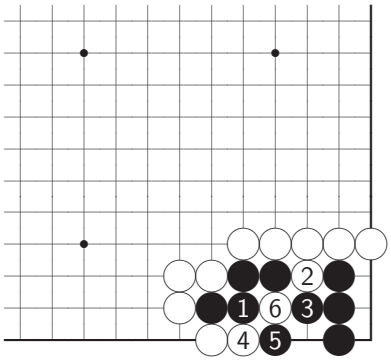

1
2
3 4

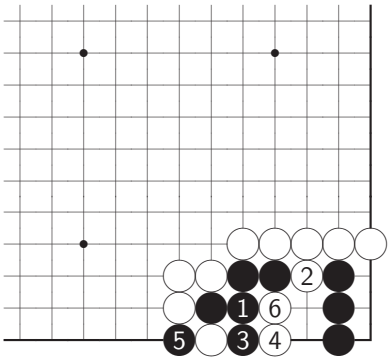

1

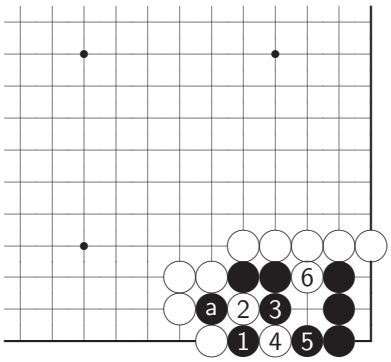

2 3
1

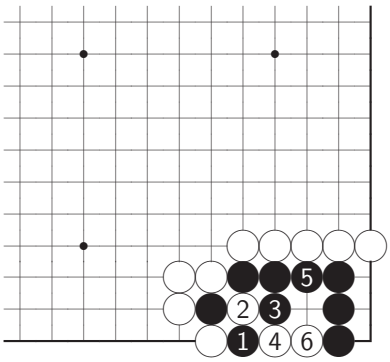

2
4 5 3
1

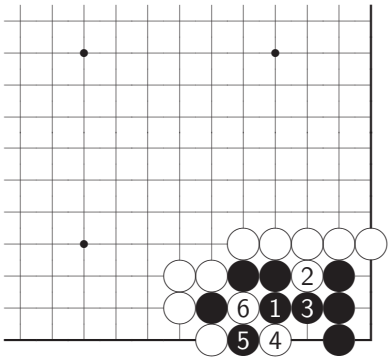

2
1 5 3
4 6

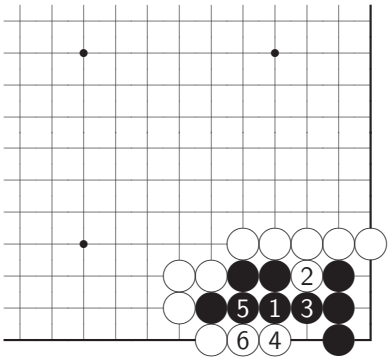

2
1 6 3
4 5

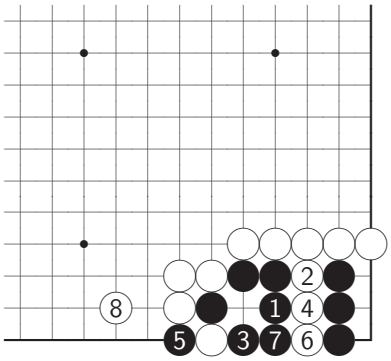

2
1 6
5 3 4

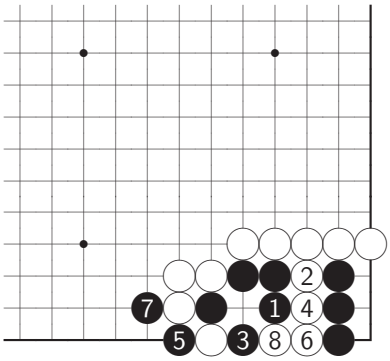

6
a 2 3
1 4 5

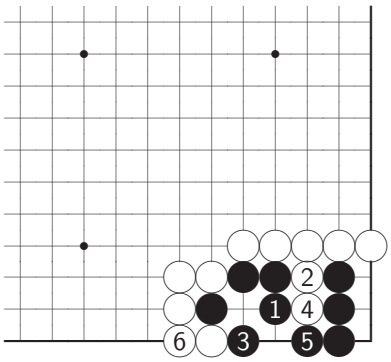

5
2 3
1 4 6

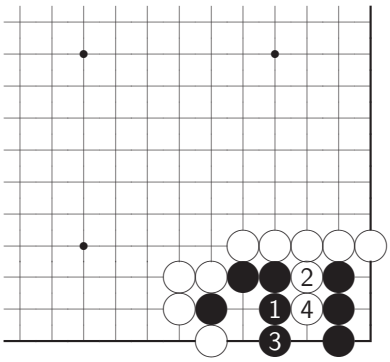

2
6 1 3
5 4

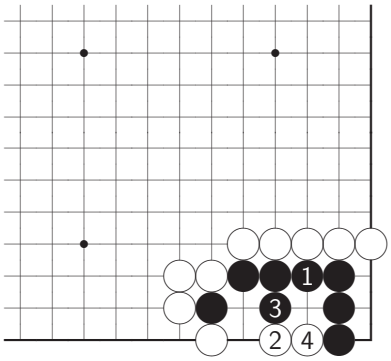

2
5 1 3
6 4

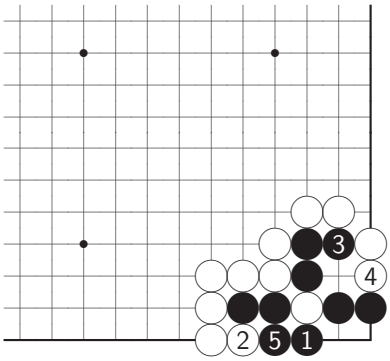

2
8 1 4
5 3 7 6

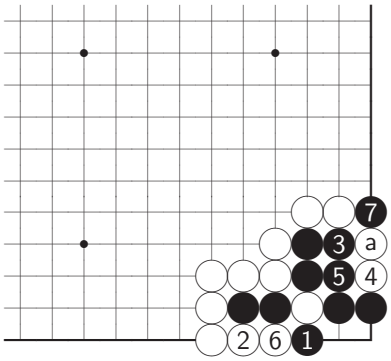

2
7 1 4
5 3 8 6

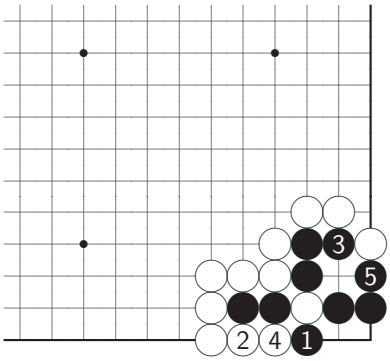

2
1 4
6 3 5

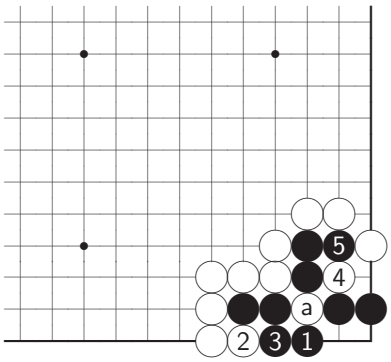

2
1 4
3

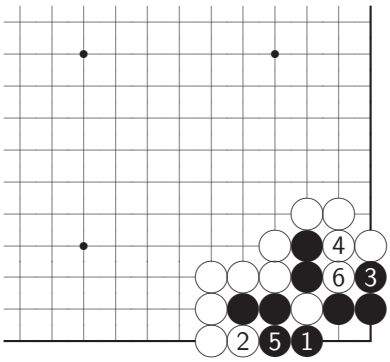

1
3
2 4

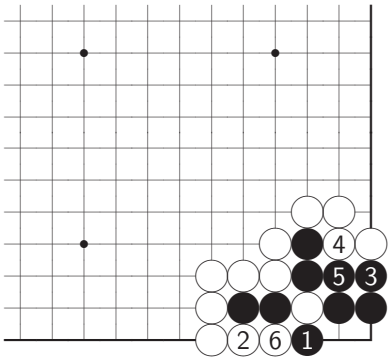

3
4
2 5 1

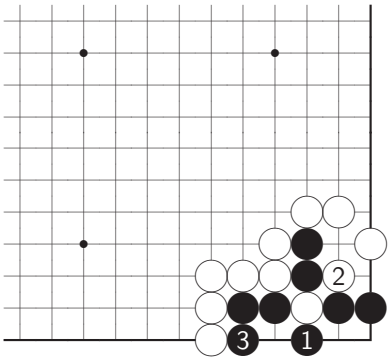

7
3 a
5 4
2 6 1

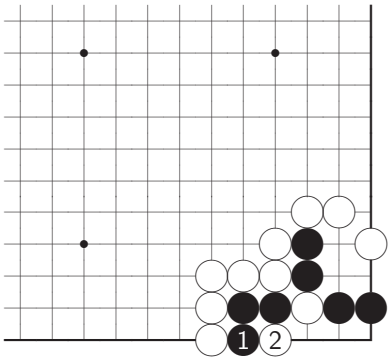

3
5
2 4 1

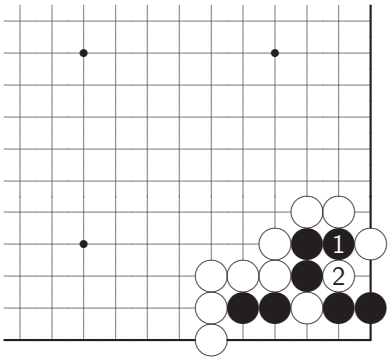

5
4
a
2 3 1

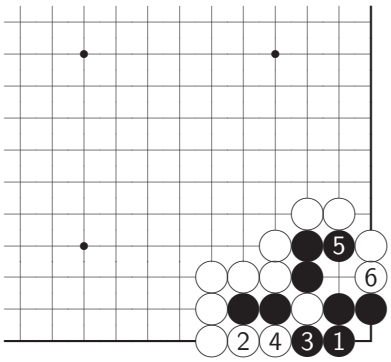

4
6 3
2 5 1

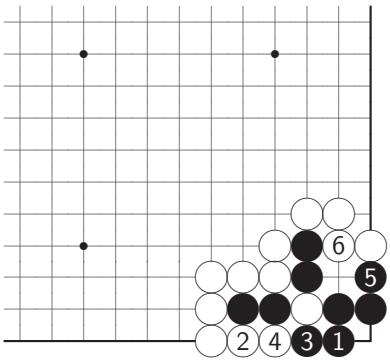

4
5 3
2 6 1

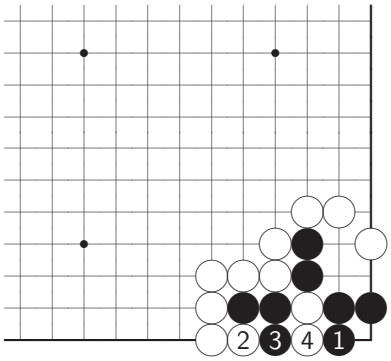

2
3 1

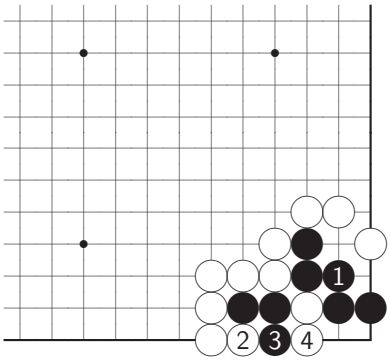

1 2

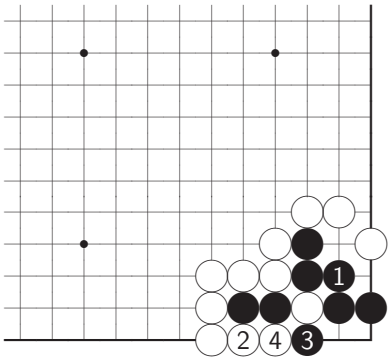

1
2

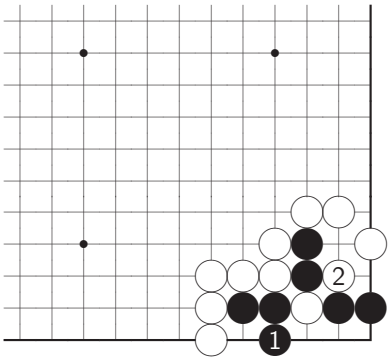

5
6
2 4 3 1

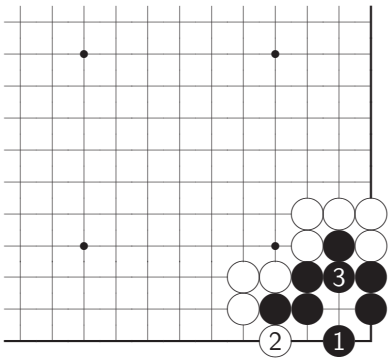

6
5
2 4 3 1

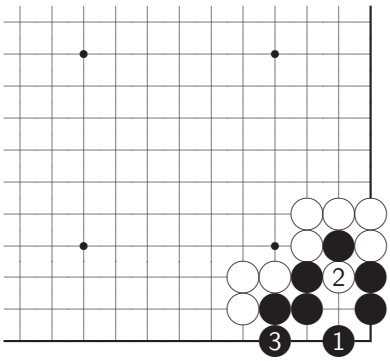

2 3 4 1

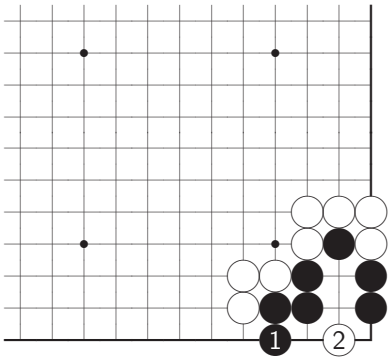

1
2 3 4

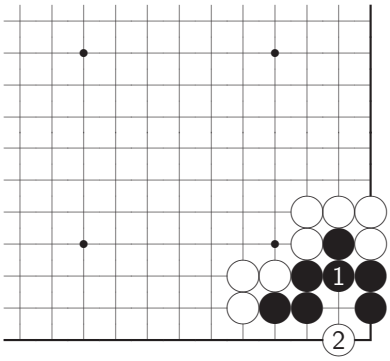

1
2 4 3

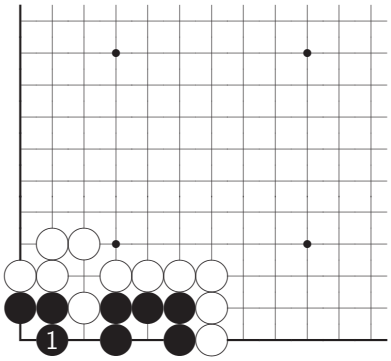

2
1

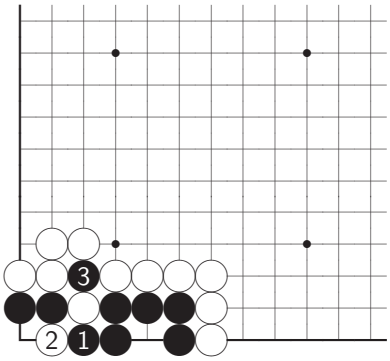

3
2 1

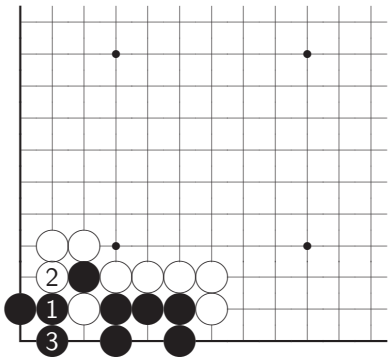

2
3 1

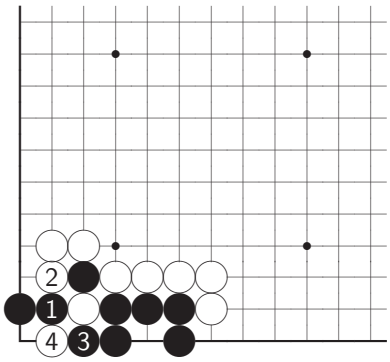

1
2

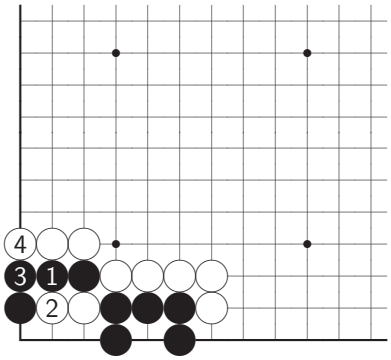

1
2

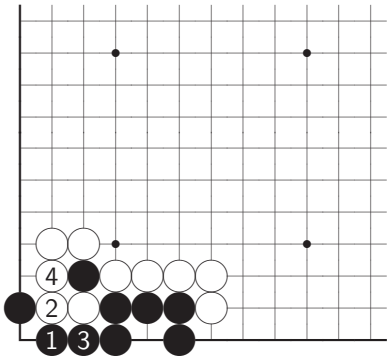

1

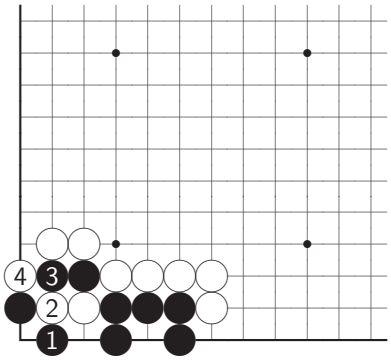

3
2
1

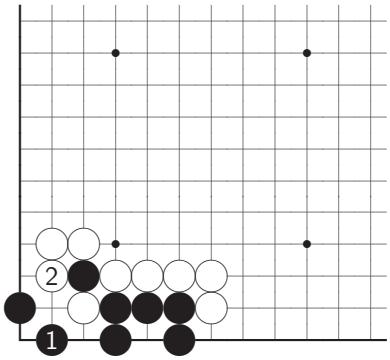

2
1
3

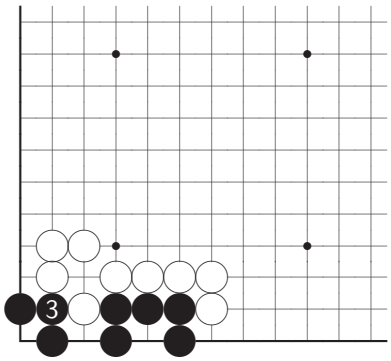

2
1
4
3

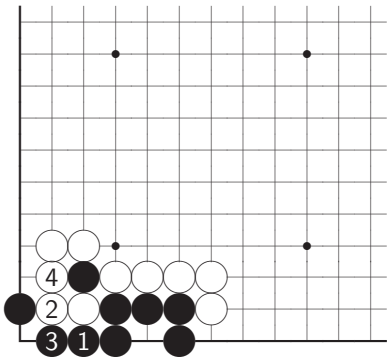

4
3 1
2

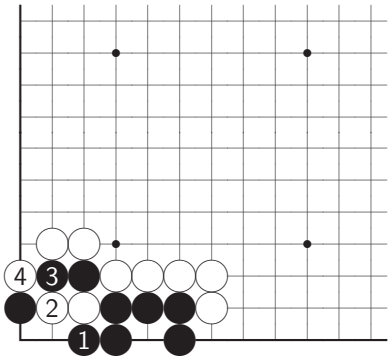

4
2
1 3

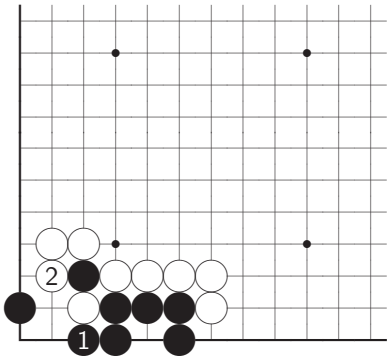

4 3
2
1

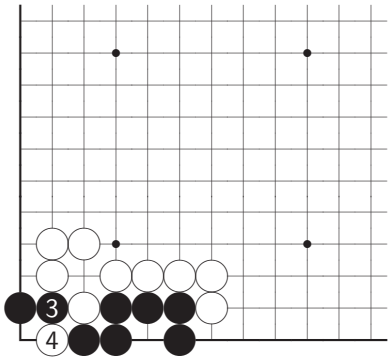

2
1

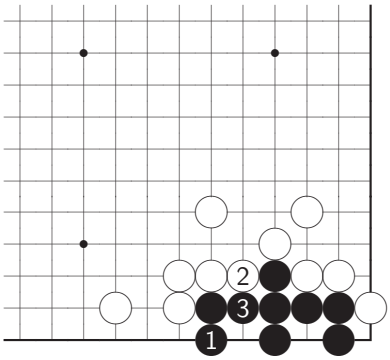

3

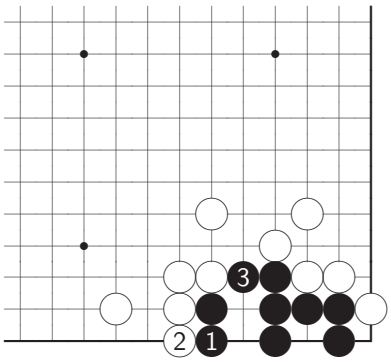

4
2
3 1

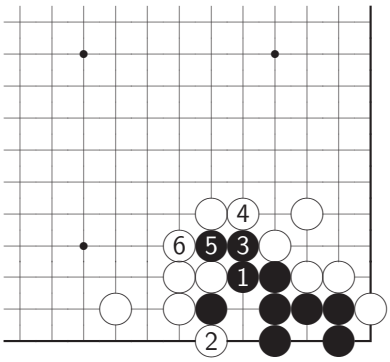

4
3
2
1

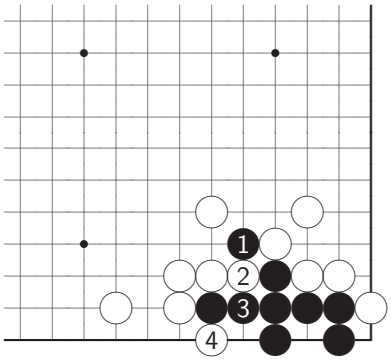

2
1

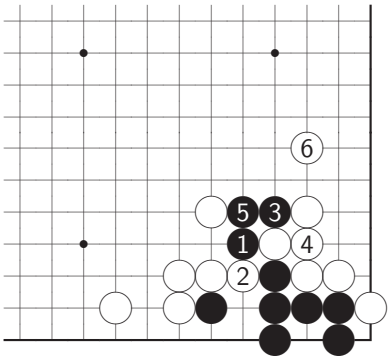

3
4

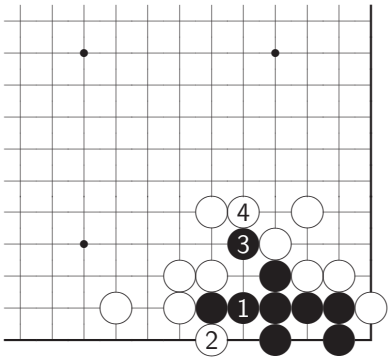

2
3
1

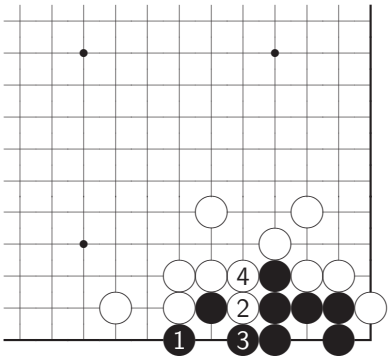

3
2
1

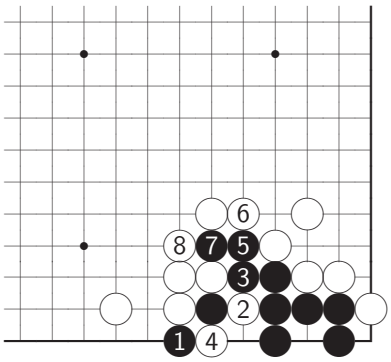

4
6
5
3
1
2

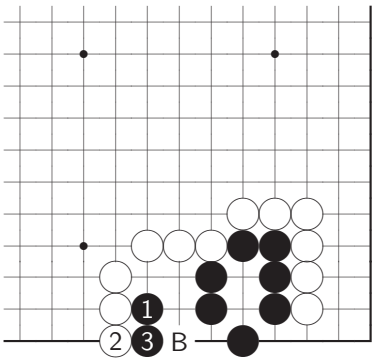

1
2
3
4

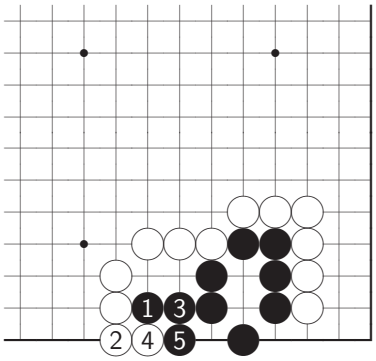

6
5
3
1
4
2

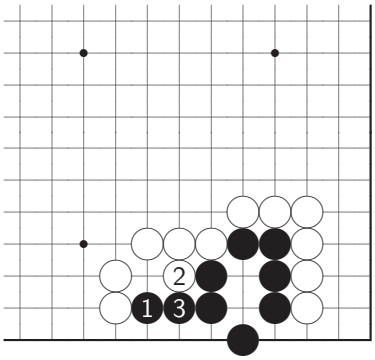

4
3
1
2

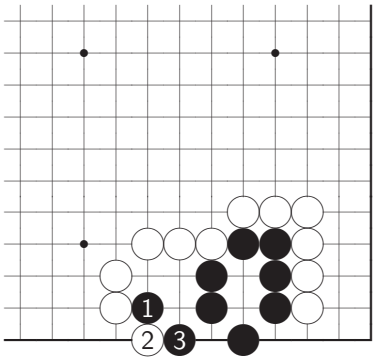

4
2
1
3

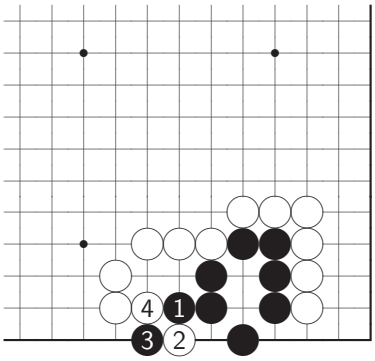

6
8
7
5
3
2
1
4

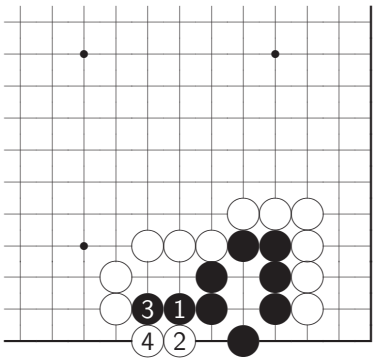

1
2
3
B

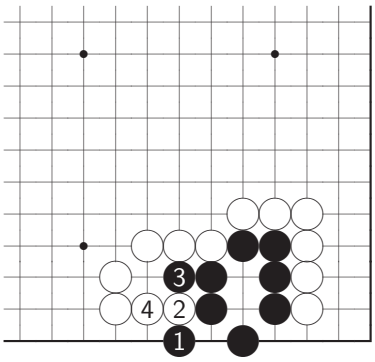

1 3
2 4 5

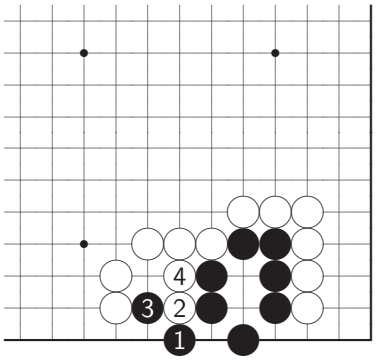

2
1 3

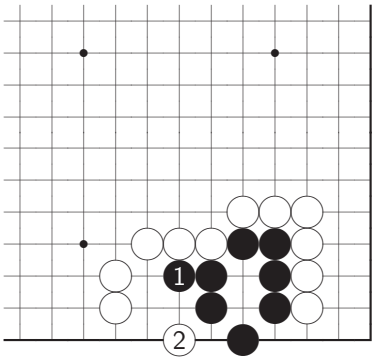

1
2 3

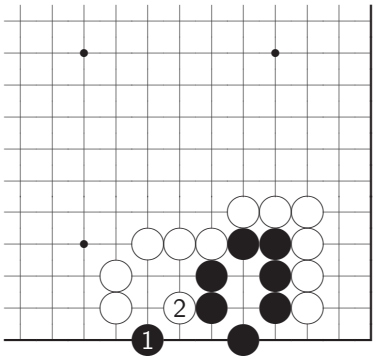

4 1
3 2

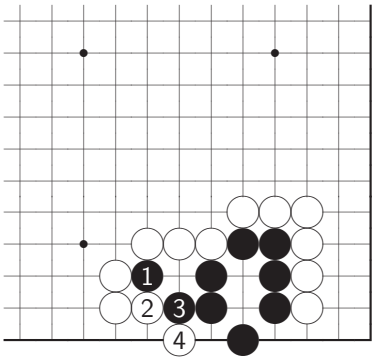

3 1
4 2

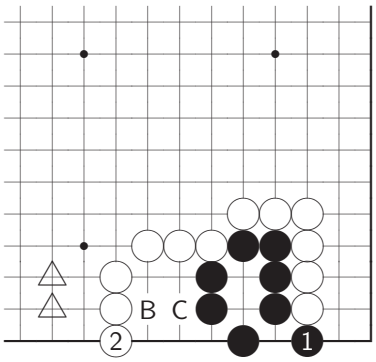

3
4 2
1

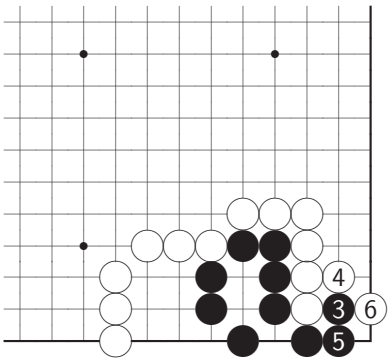

4
3
2
1

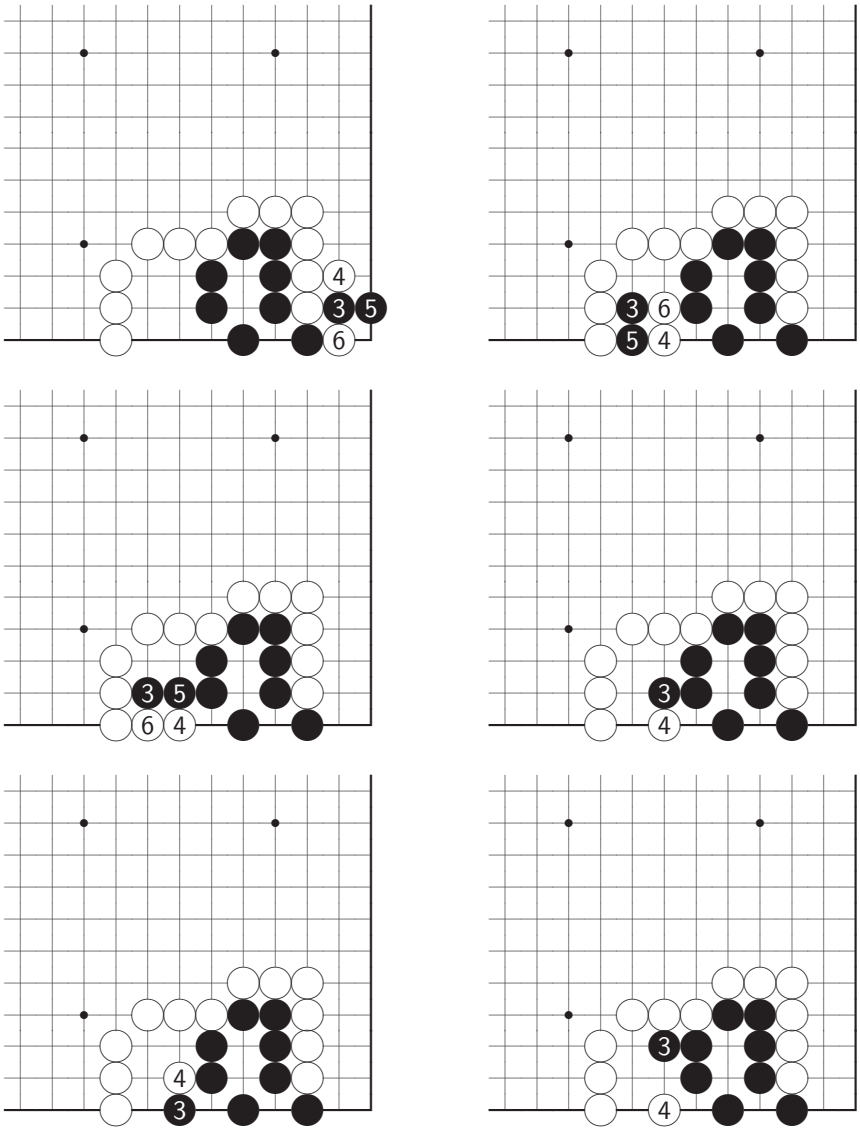

1
2

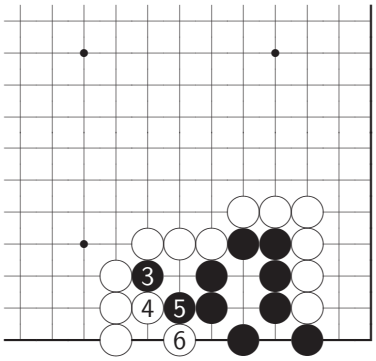

2
1

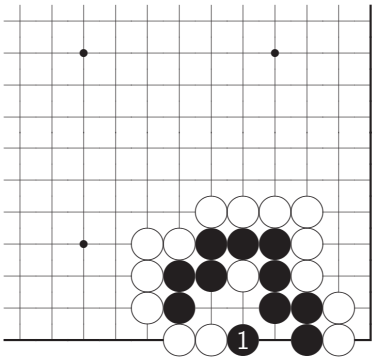

1
2
3
4

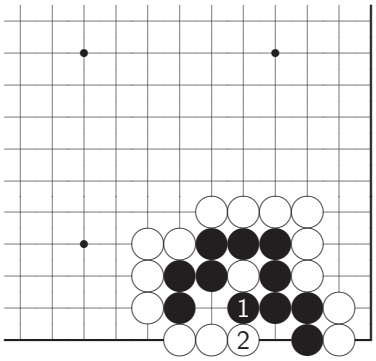

B
C
2
1

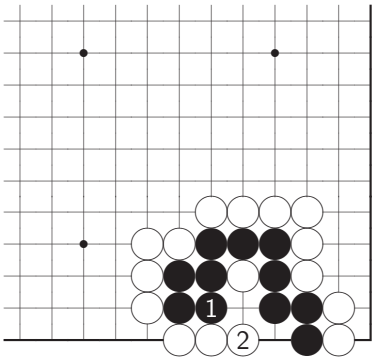

4
3
6
5

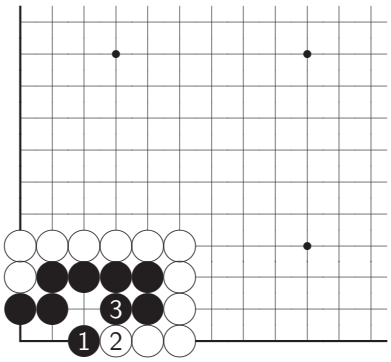

4
3 5
6
3 6
5 4
3 5
6 4
3
4
4
3
3
4

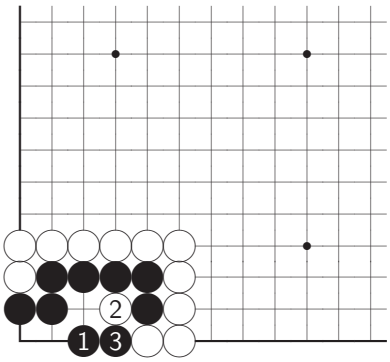

3
4
5
6

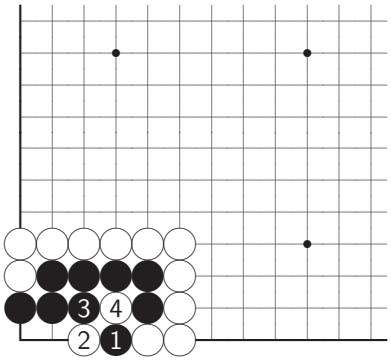

1

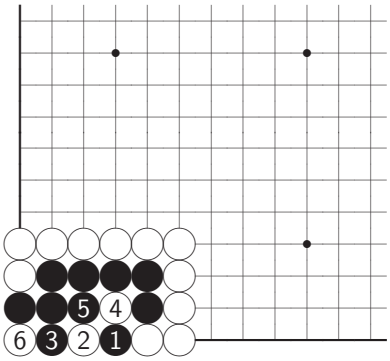

1
2

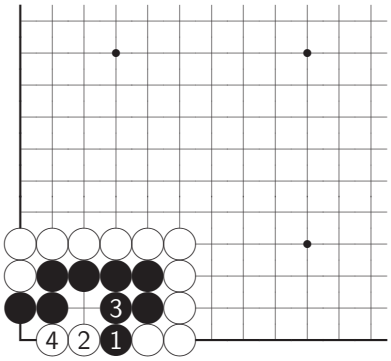

1
2

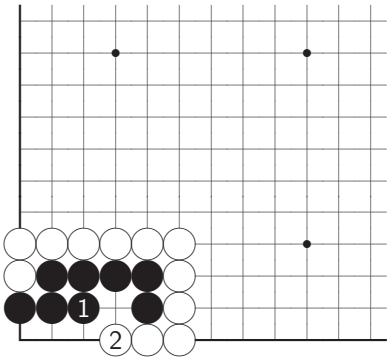

3
1
2

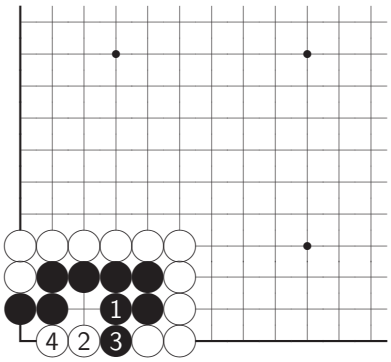

2
1
3

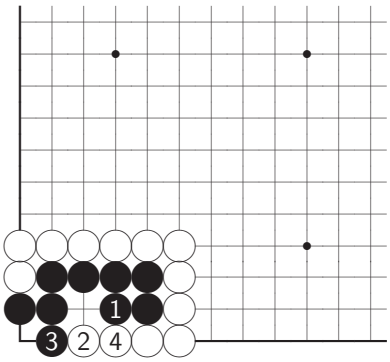

3 4
2 1

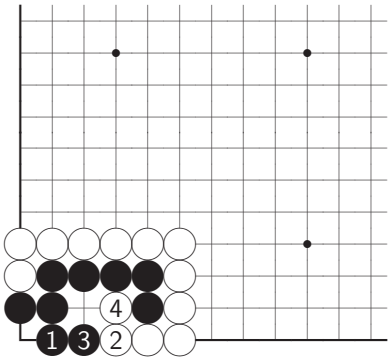

5 4
6 3 2 1

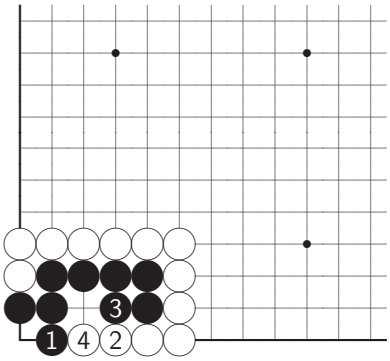

3
4 2 1

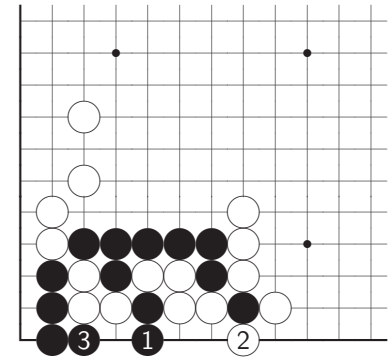

1
2

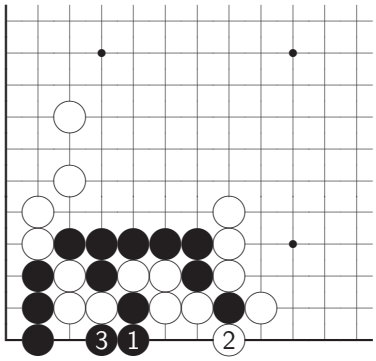

1
4 2 3

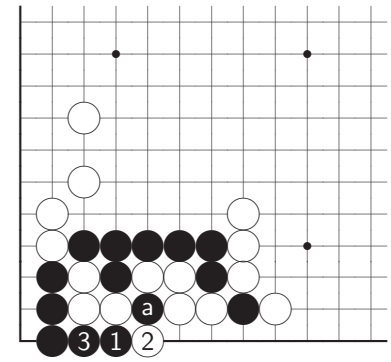

1
3 2 4

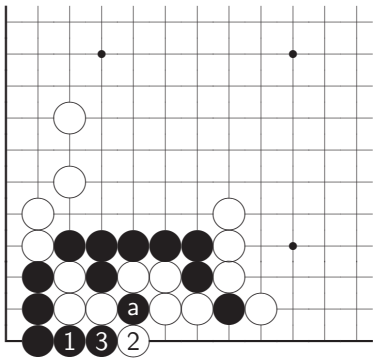

4
1 3 2

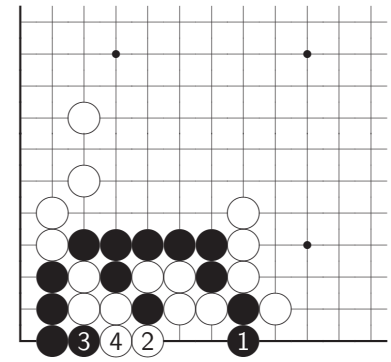

3
1 4 2

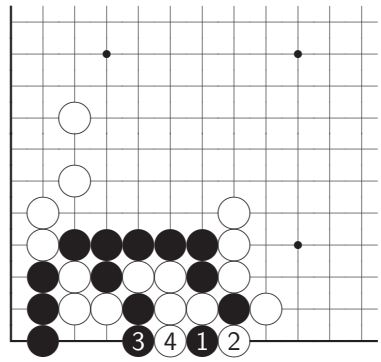

3 1 2

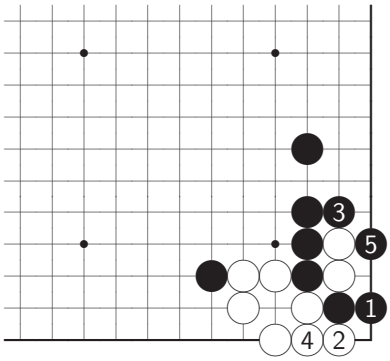

3 1 2

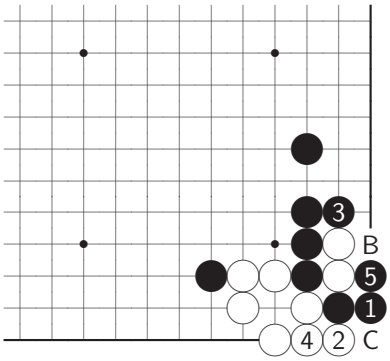

a
3 1 2

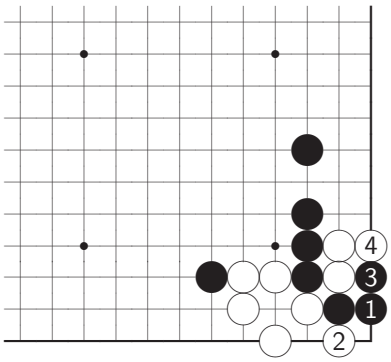

a
1 3 2

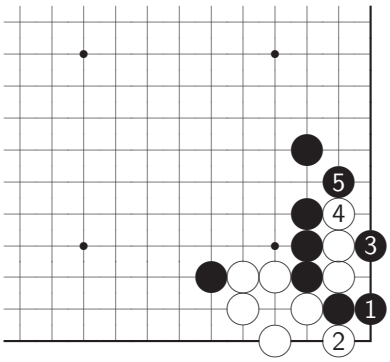

3
4
2
1

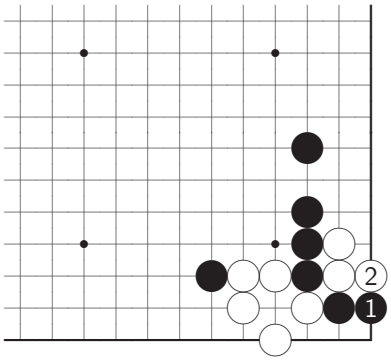

3
4
1
2

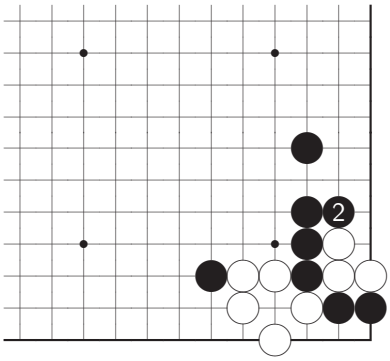

3
5
1
4
2

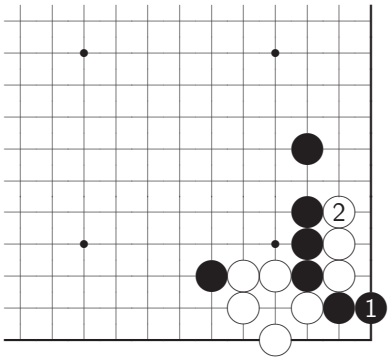

3
B
5
1
4
2
C

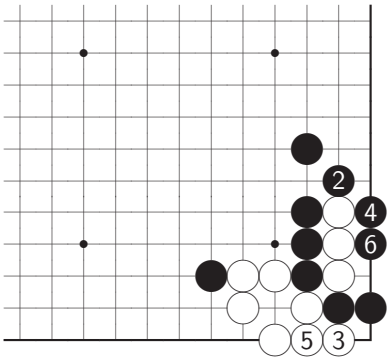

4
3
1
2

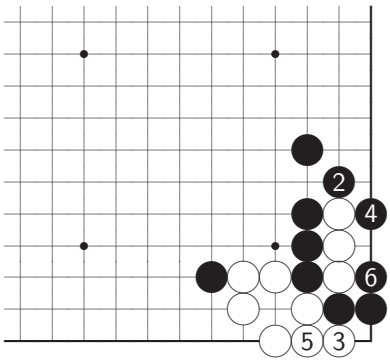

5
4
3
1
2

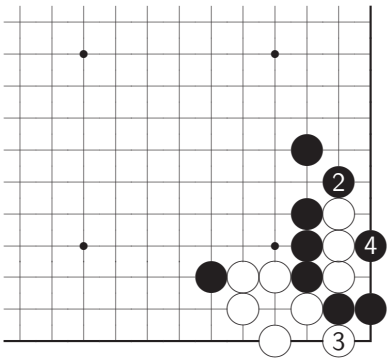

2
1

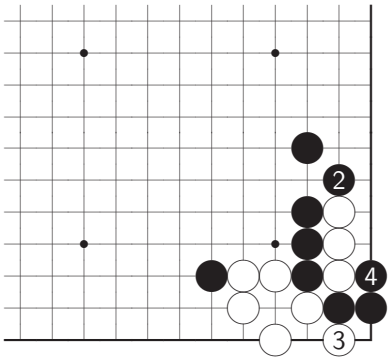

2

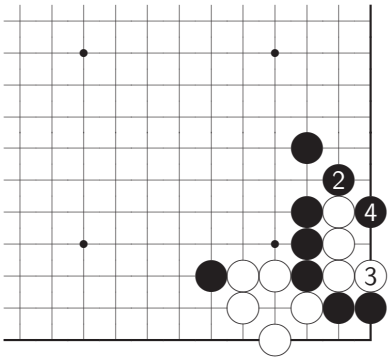

2
1

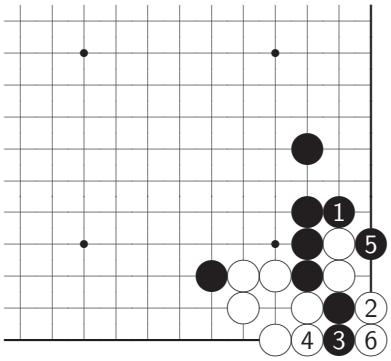

2
4
6
5
3

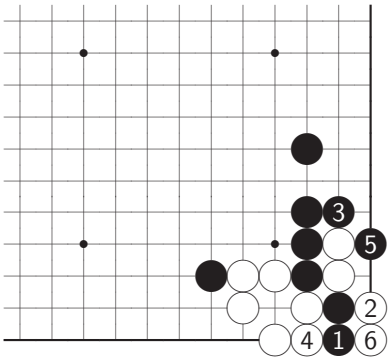

2
4
6
5
3

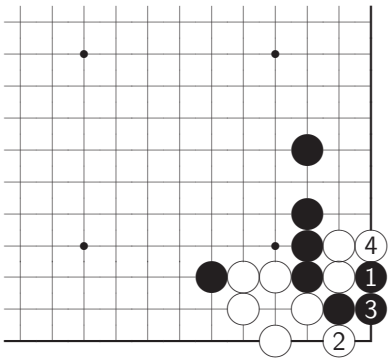

2
4
3

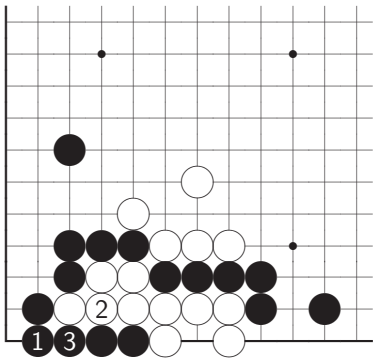

2
4
3

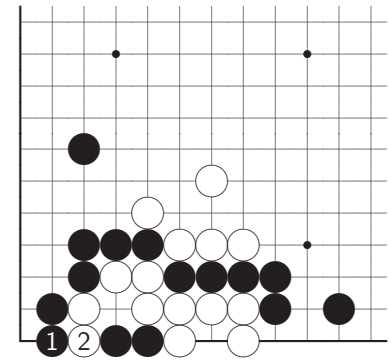

2
4
3

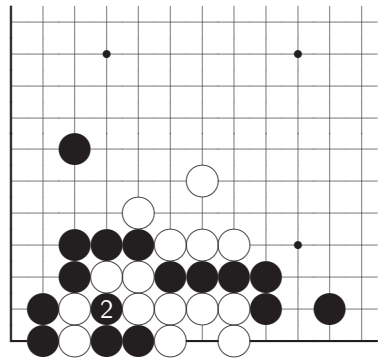

1
5
2
4
3
6

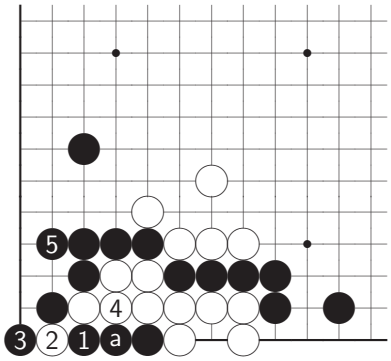

3
5
2
4
1
6

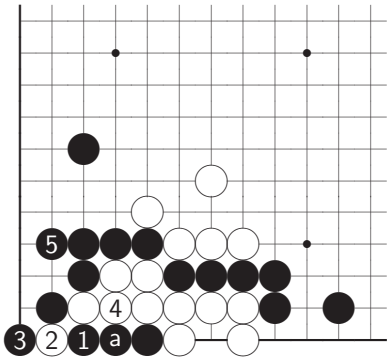

4
1
3
2

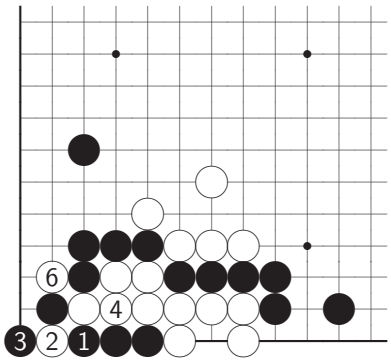

2
1
3

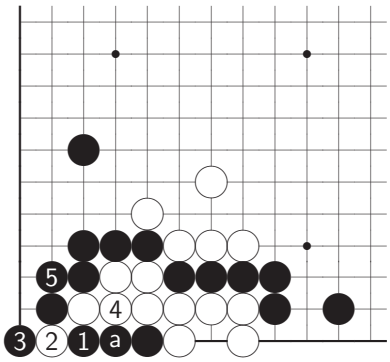

1
2

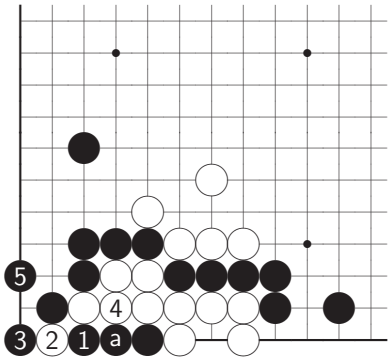

2

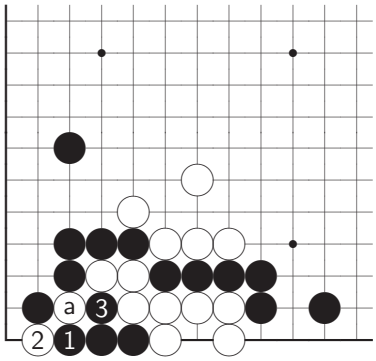

5
4
3
2
1
a

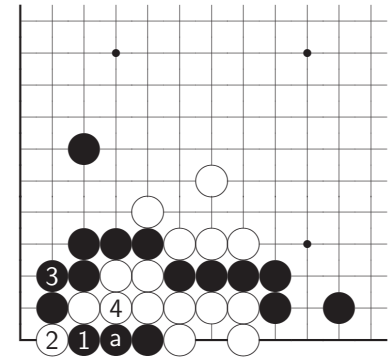

5
4
3
2
1
a

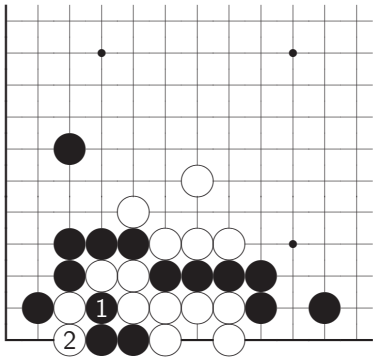

6
4
3
2
1

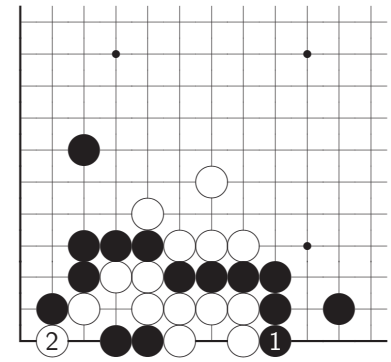

5
4
3
2
1
a

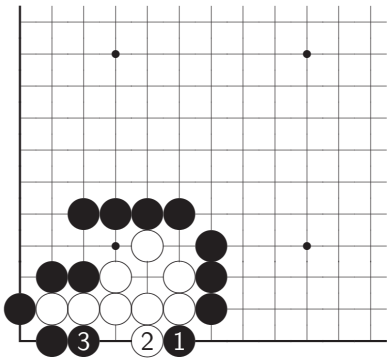

5
4
3 2 1 a

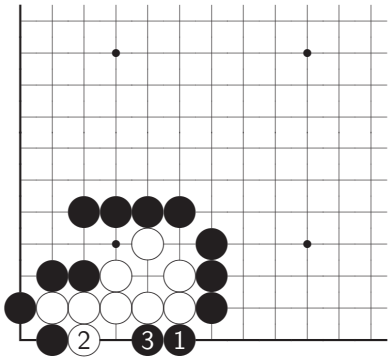

a 3
2 1

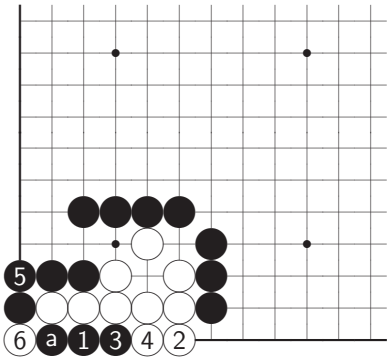

3
4
2 1 a

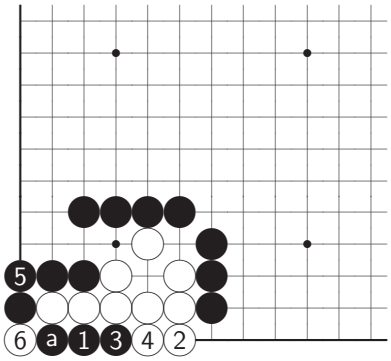

1
2

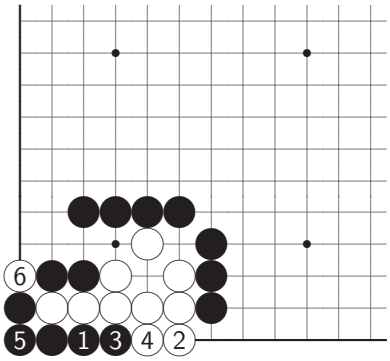

2 1

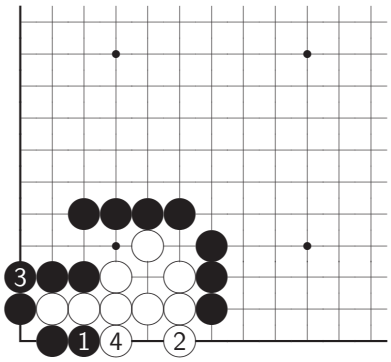

3 2 1

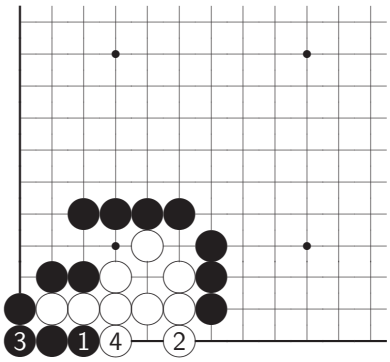

2
3
1

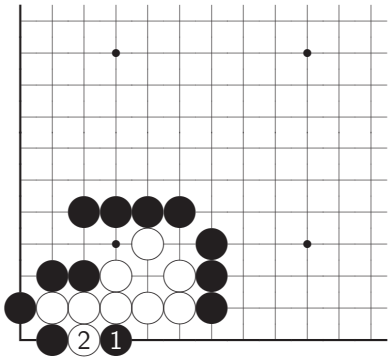

5
6
a
1
3
4
2

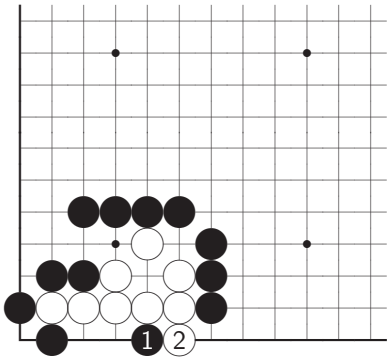

5
6
a
1
3
4
2

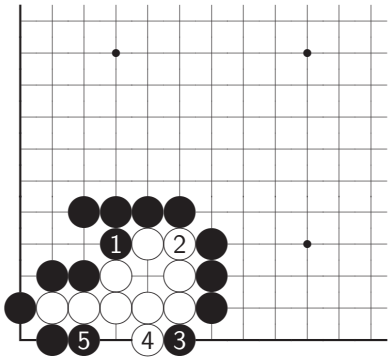

6
5
1
3
4
2

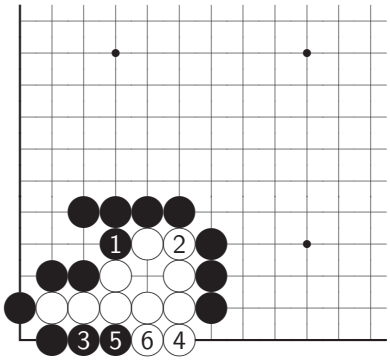

3
1
4
2

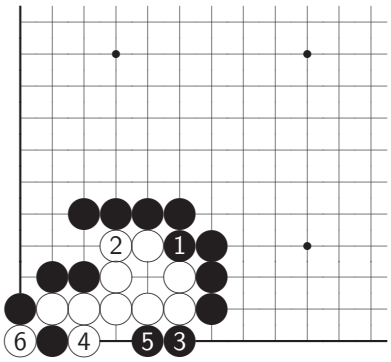

3
1
4
2

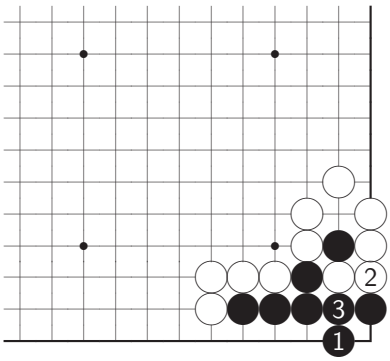

2 1

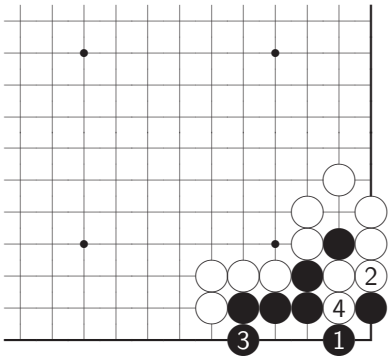

1 2

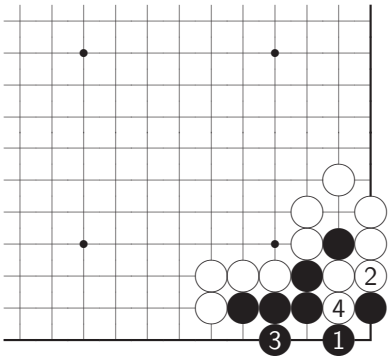

1 2
5 4 3

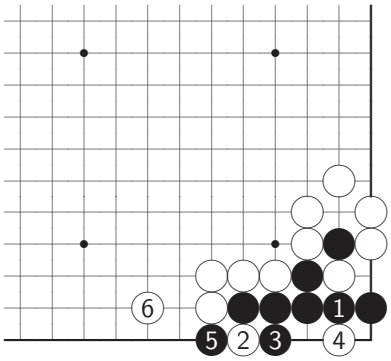

1 2
3 5 6 4

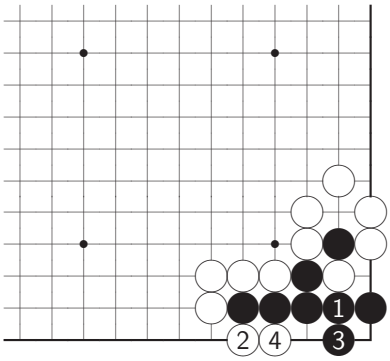

2 1
6 4 5 3

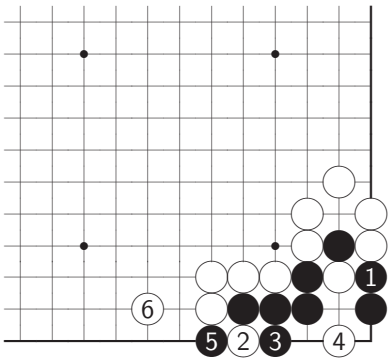

2
3
1

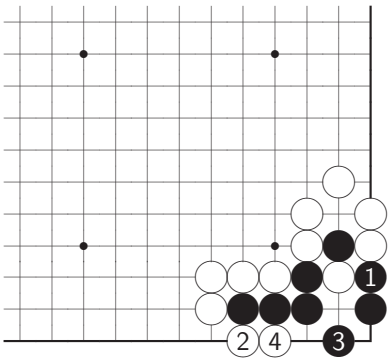

2
4
3
1

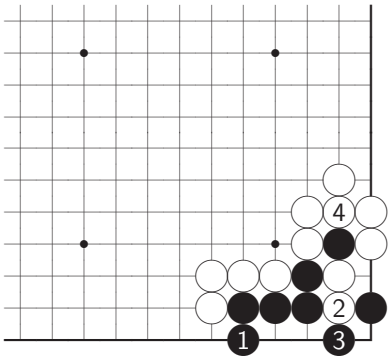

2
4
3
1

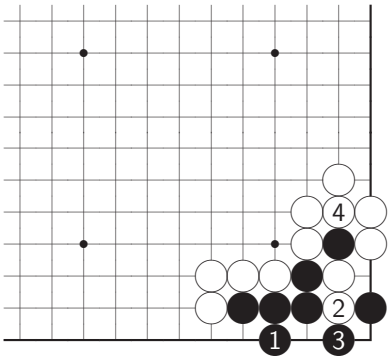

6
1
5
2
3
4

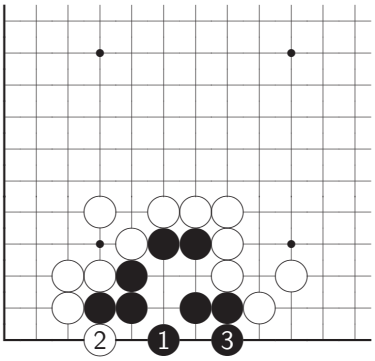

1
2
4
3

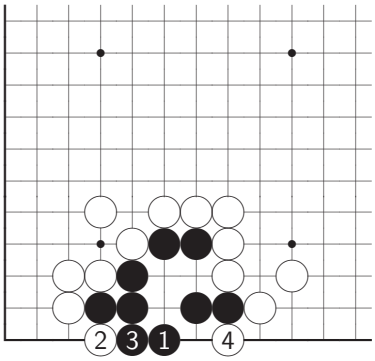

1
6
5
2
3
4

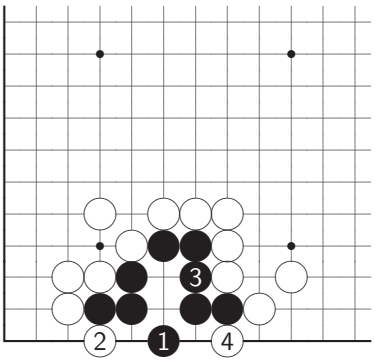

1
2
4
3

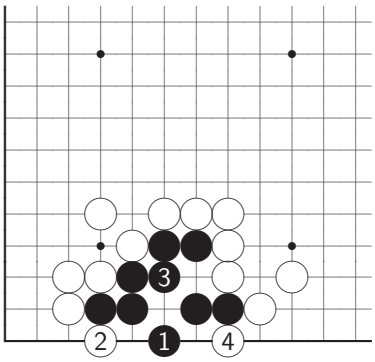

4
2
1
3

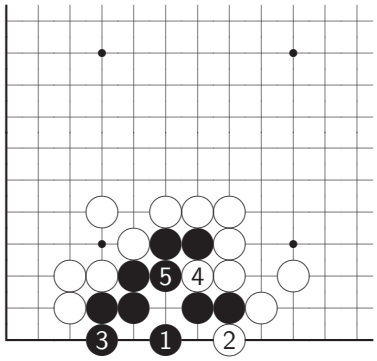

4
2
1
3

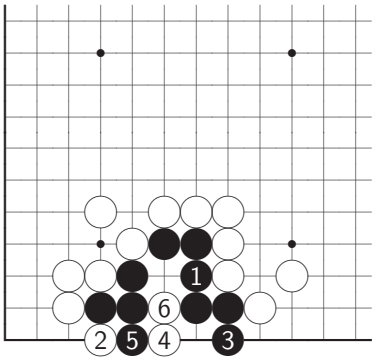

2
1
3

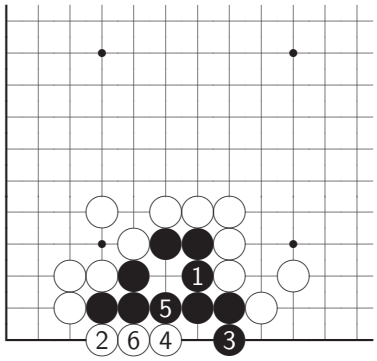

2
3
1
4

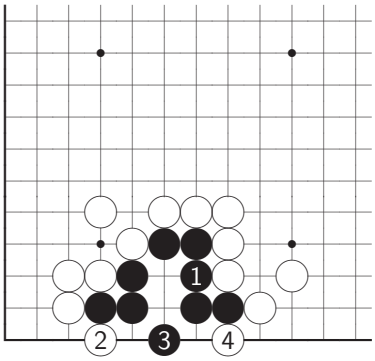

3
2
1
4

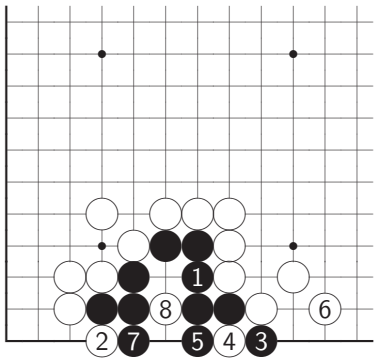

3
2
1
4

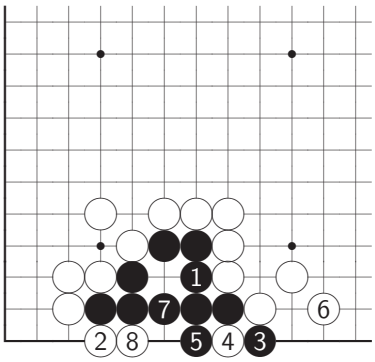

5 4
3 1 2

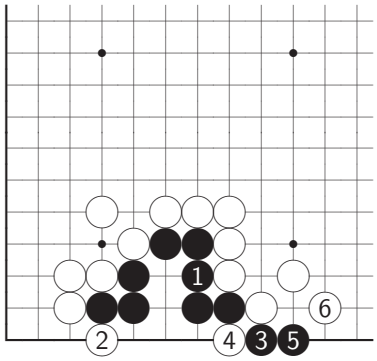

1
6
2 5 4 3

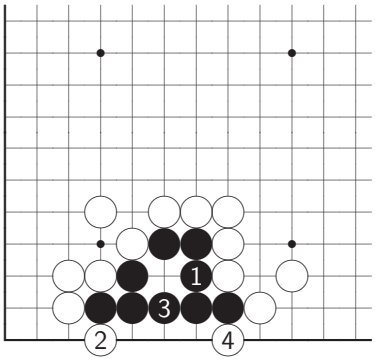

1
5
2 6 4 3

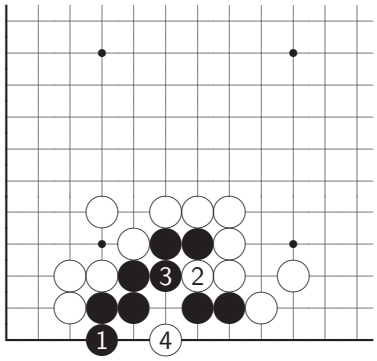

1
2 3 4

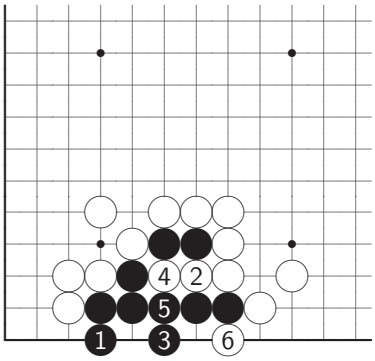

1
8
6
2 7 5 4 3

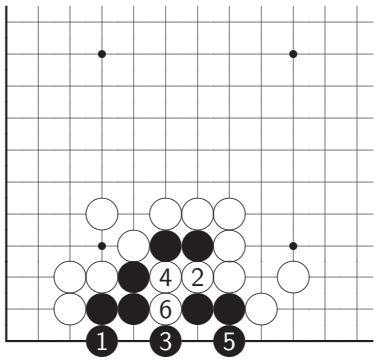

1
7
6
2 8 5 4 3

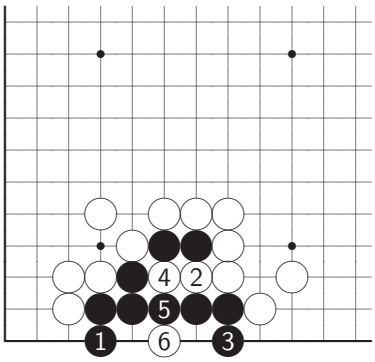

1
6
2
4
3
5

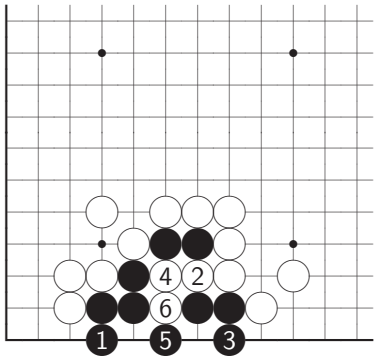

1
3
2
4

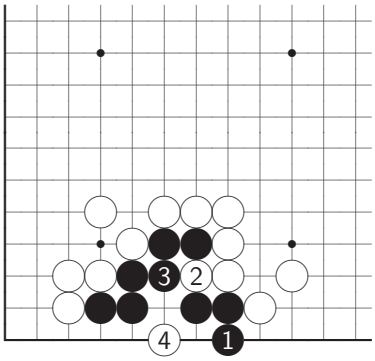

3
2
1
4

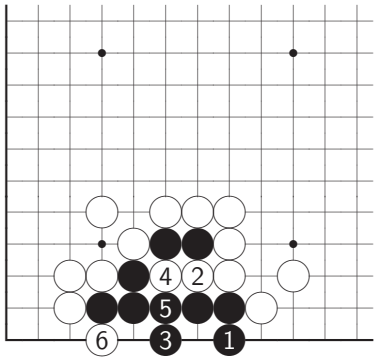

4
2
5
1
3
6

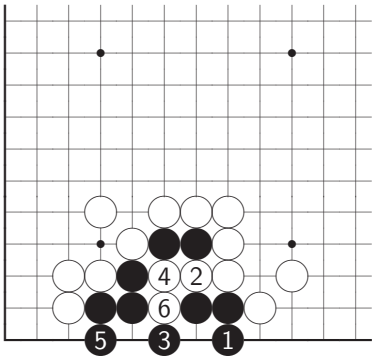

4
2
6
1
3
5

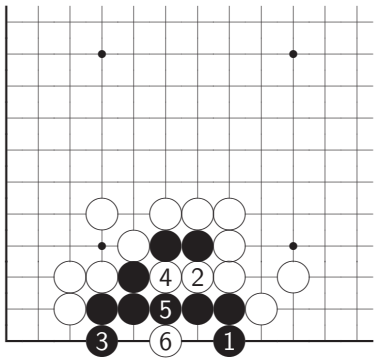

4
2
5
1
6
3

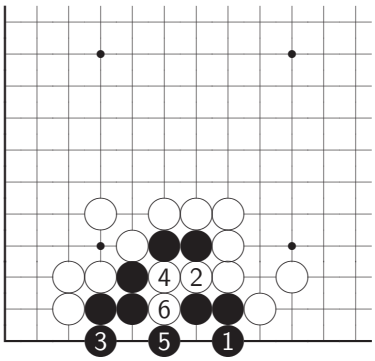

4 2
6
1 5 3

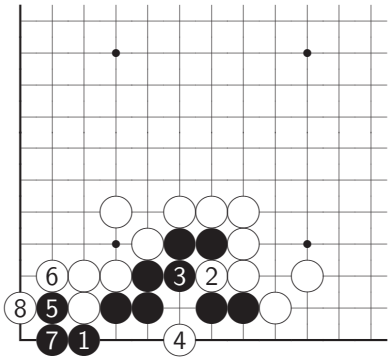

3 2
4 1

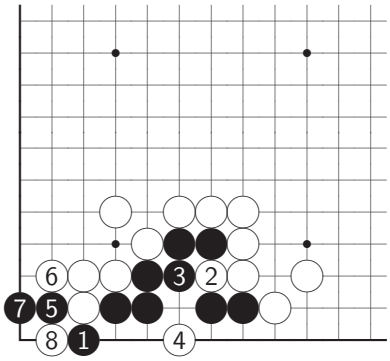

4 2
5
6 3 1

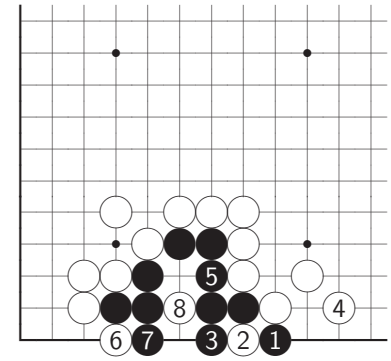

4 2
6
5 3 1

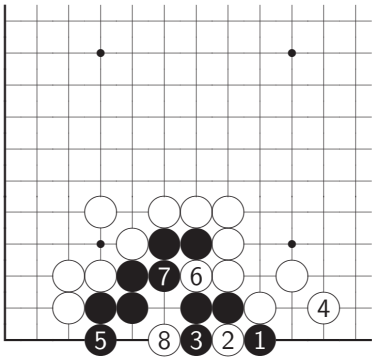

4 2
5
3 6 1

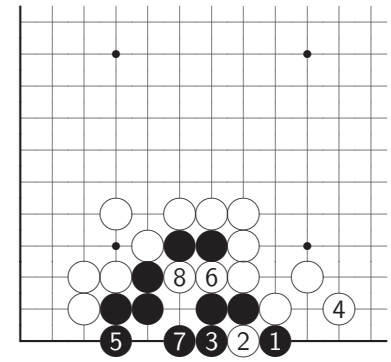

4 2
6
3 5 1

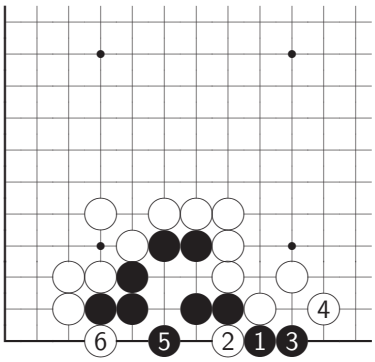

6
3 2
8 5
7 1 4

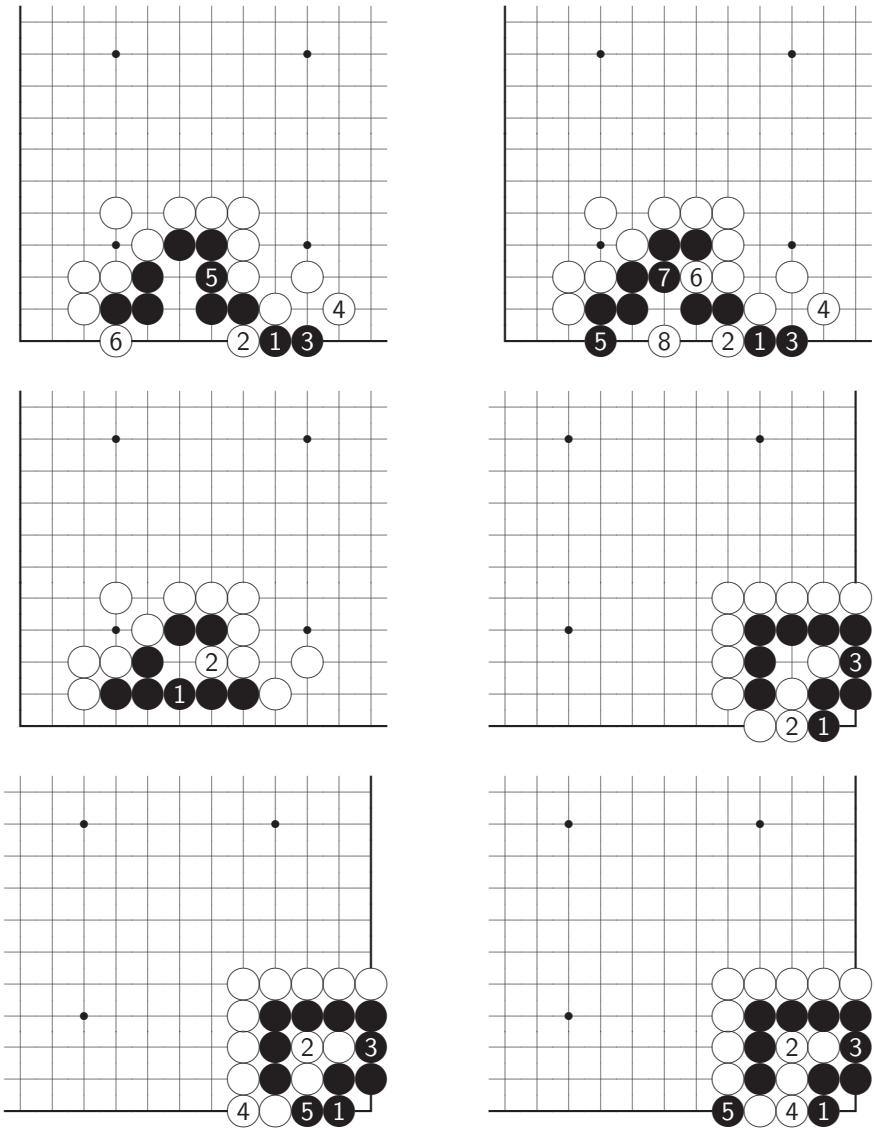

6
3 2
7 5
8 1 4

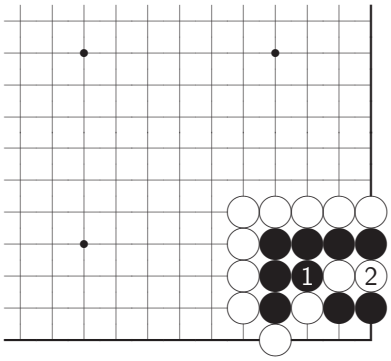

5
8 4
6 7 3 2 1

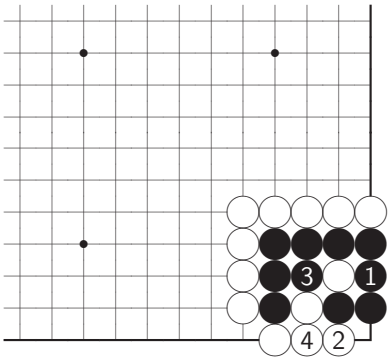

7 6
4
5 8 3 2 1

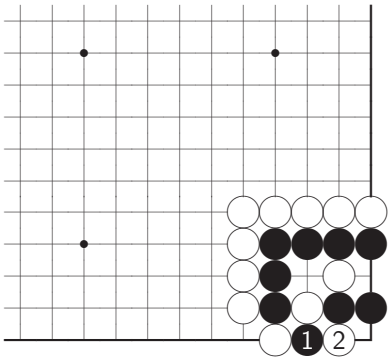

8 6
4
5 7 3 2 1

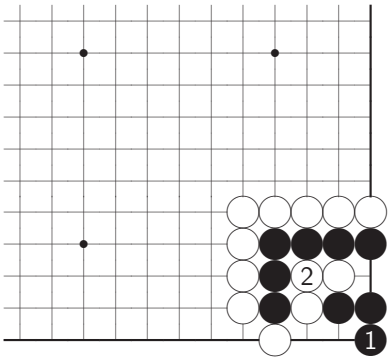

4
6 5 2 1 3

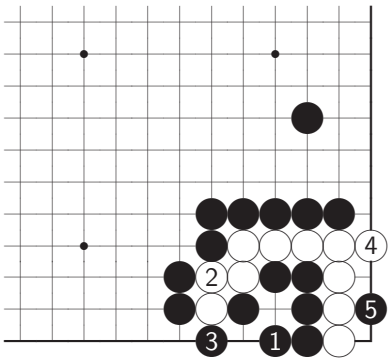

5
4
6
2 1 3
7 6
4
5 8 2 1 3
2
1
3
2 1
2
3
4 5 1
2
3
5 4 1

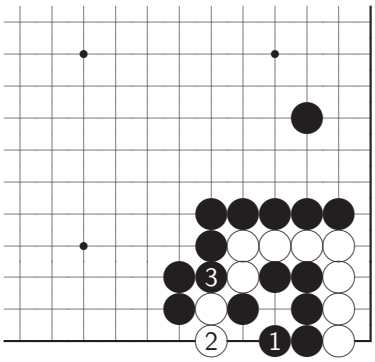

1
2

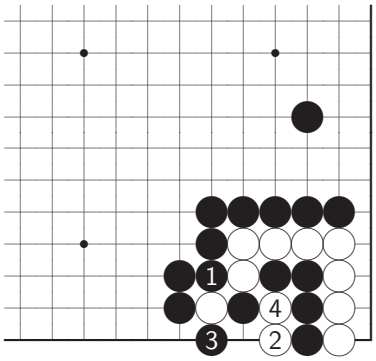

3
1
4
2

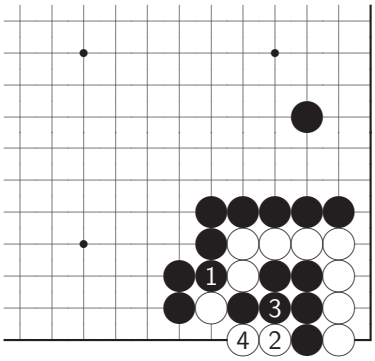

1
2

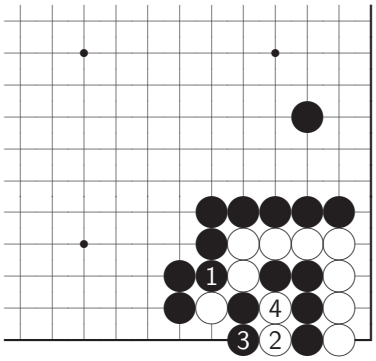

2
1

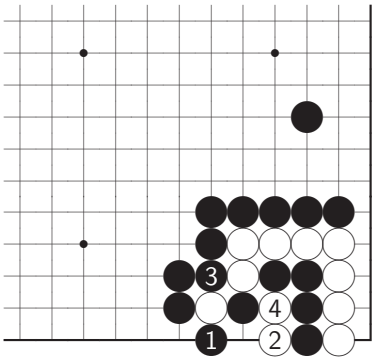

4
2
5
3
1

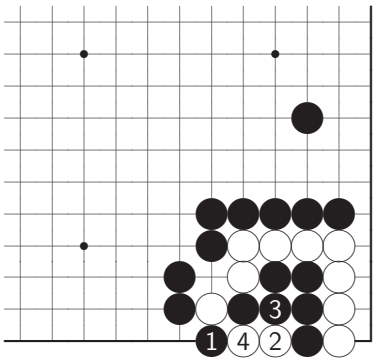

3
2
1

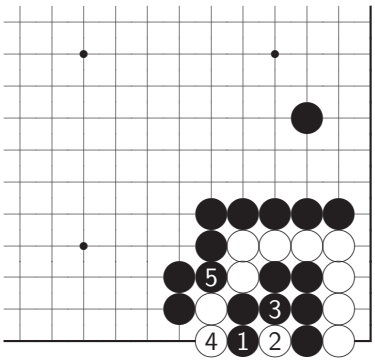

1
4
3
2

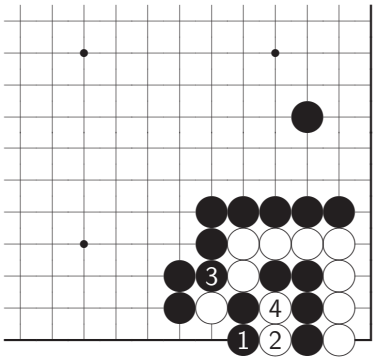

1
3
4
2

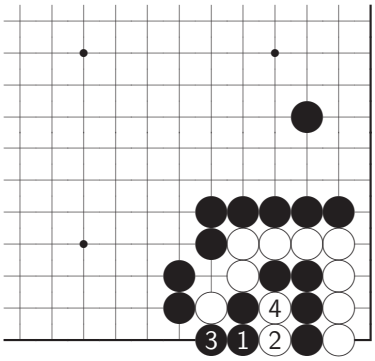

1
4
3
2

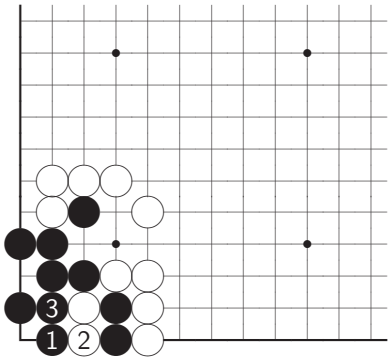

3
4
1
2

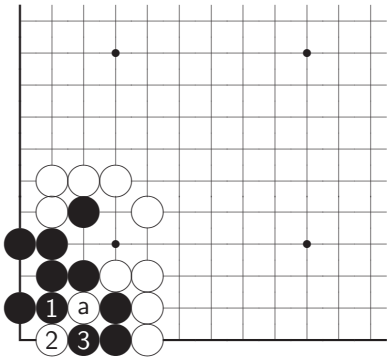

3
1
4
2

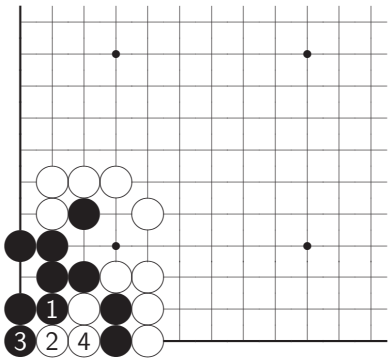

5
3
4
1
2

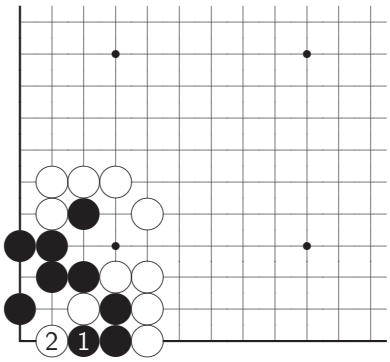

3
4
1 2

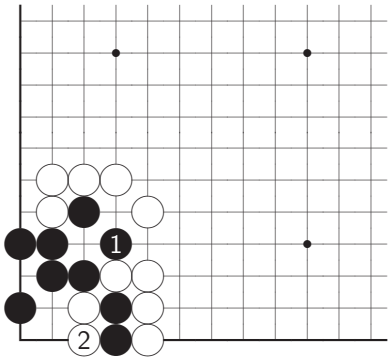

4
3 1 2

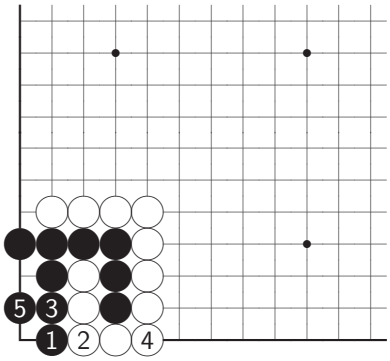

3
1 2

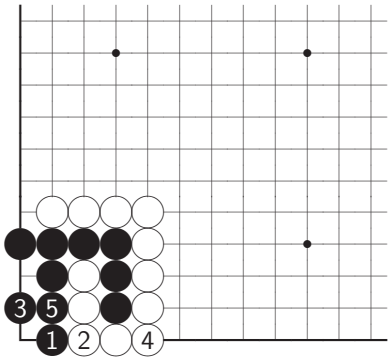

1 a
2 3

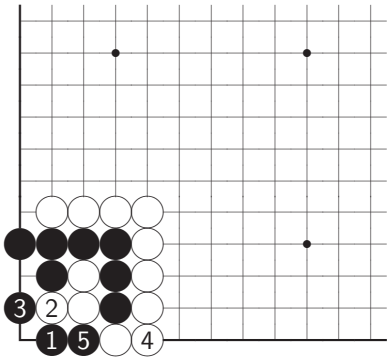

1
3 2 4

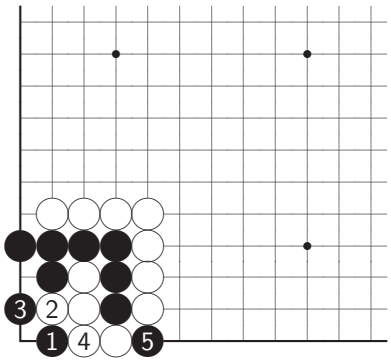

2 1

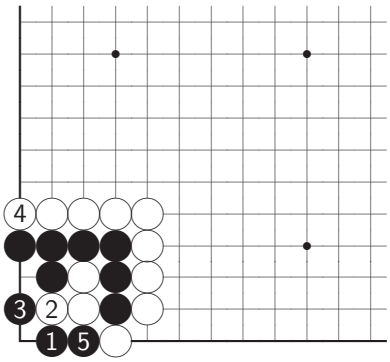

1
2

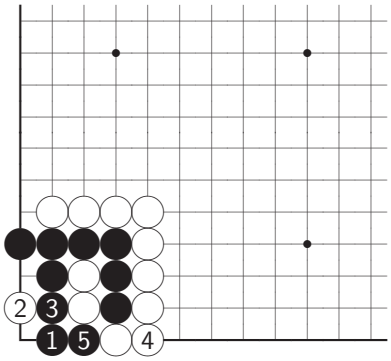

5 3
1 2 4

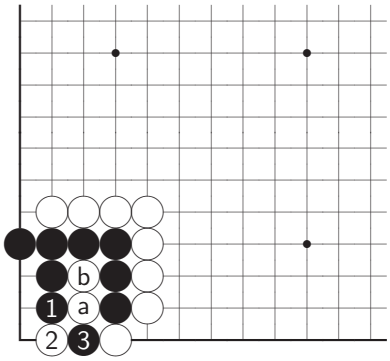

3 5
1 2 4

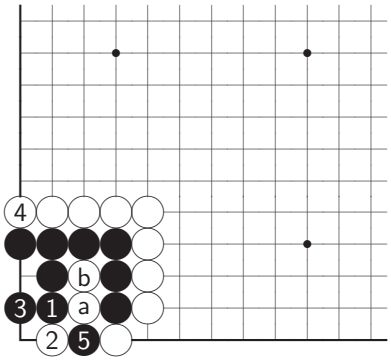

3 2
1 5 4

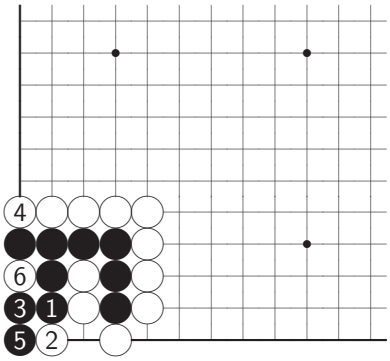

3 2
1 4 5

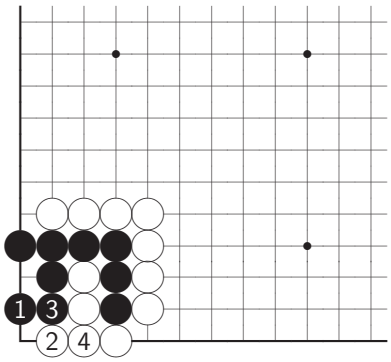

4
3 2
1 5

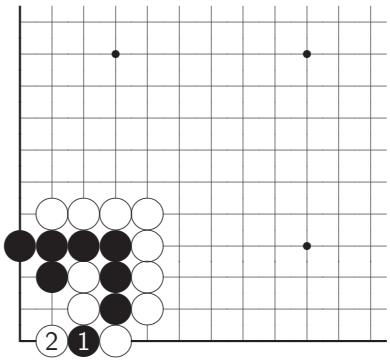

2 3
1 5 4

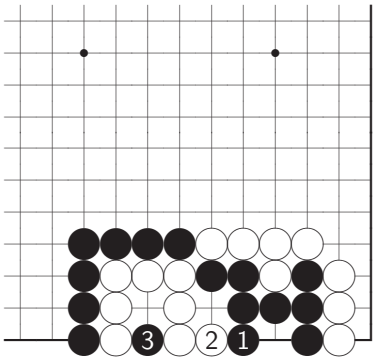

b
1 a
2 3

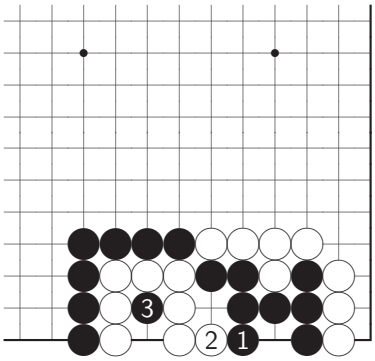

4
b
3 1 a
2 5

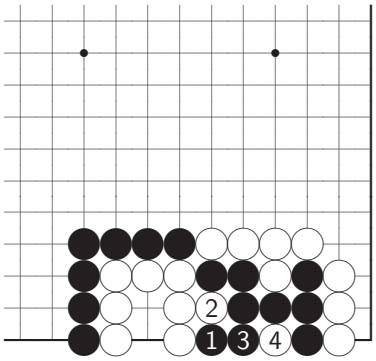

4
6
3 1
5 2

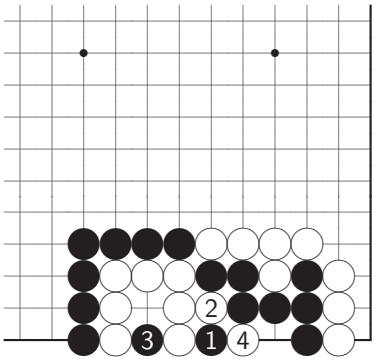

1 3
2 4

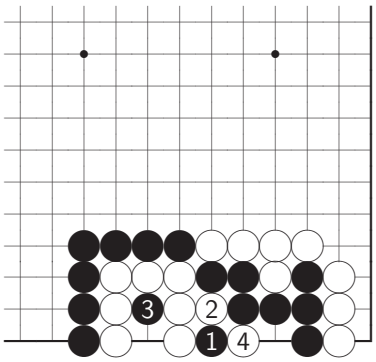

2 1

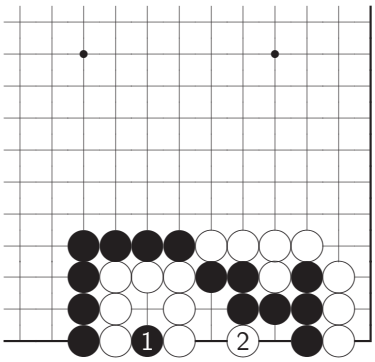

3
2
1

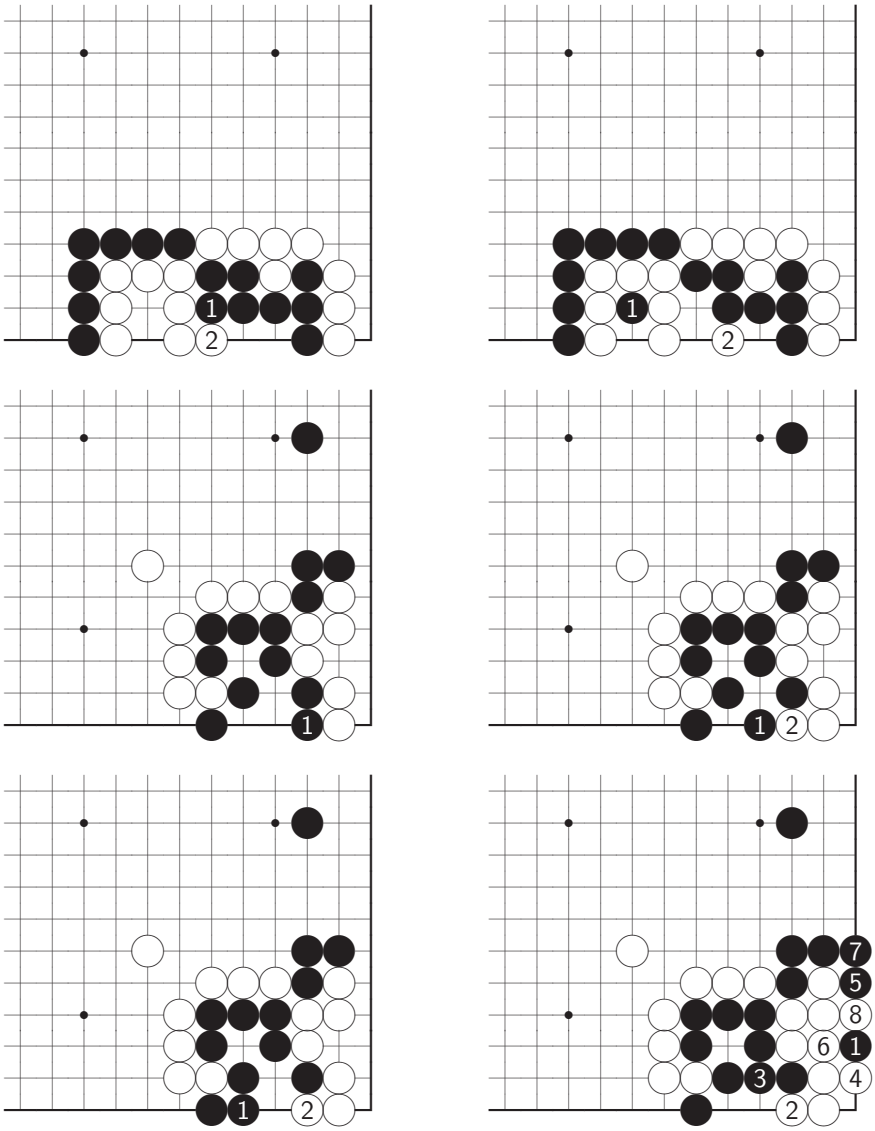

3
2
1

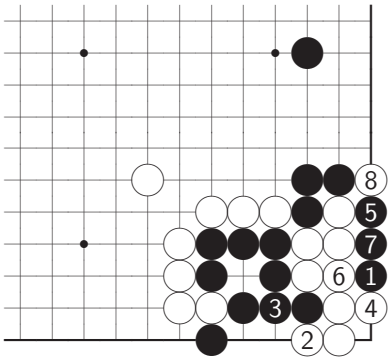

2
1
3
4

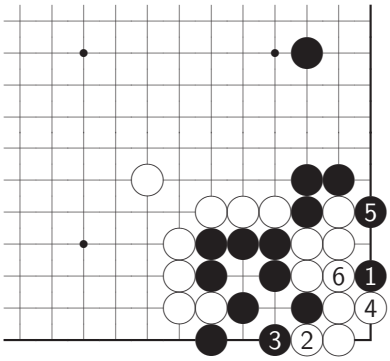

2
3
1
4

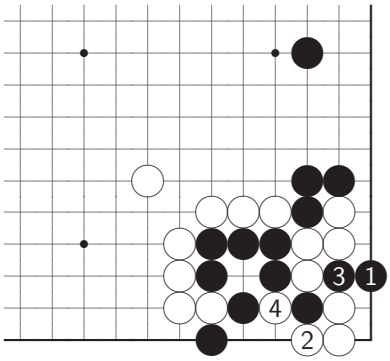

3
2
1
4

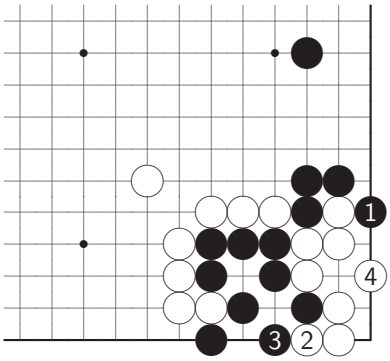

1
2

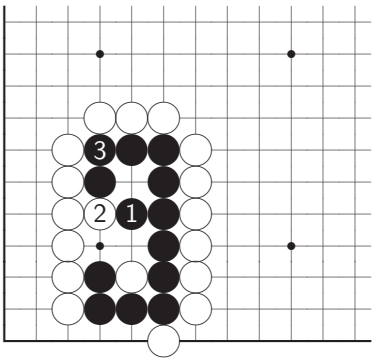

1
2
1
2
1
1
2
1
2
7
5
8
6
1
3
4
2

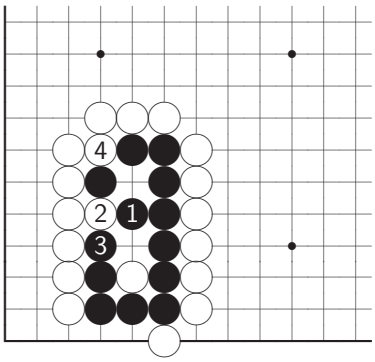

8
5
7
6 1
3 4
2

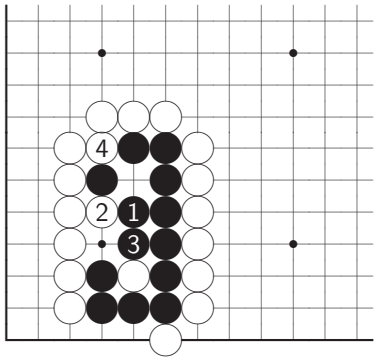

5
6 1
4
3 2

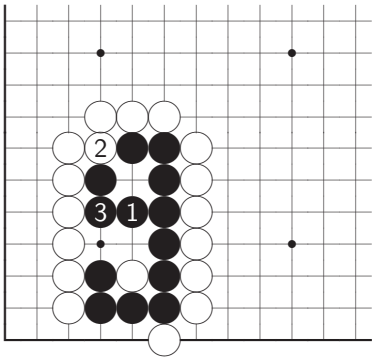

3 1
4
2

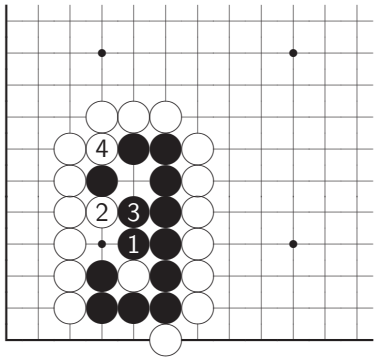

1
4
3 2

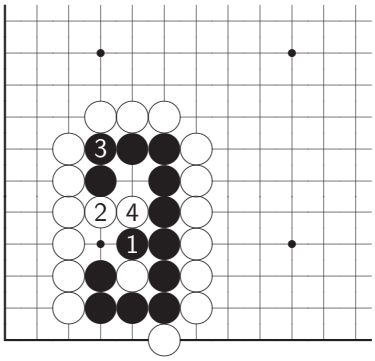

3
2 1

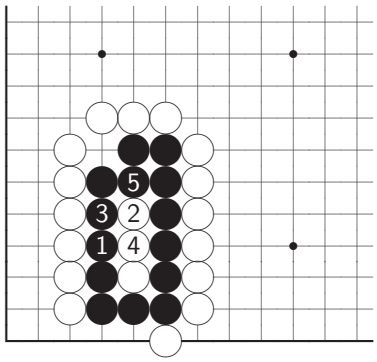

4
2 1
3

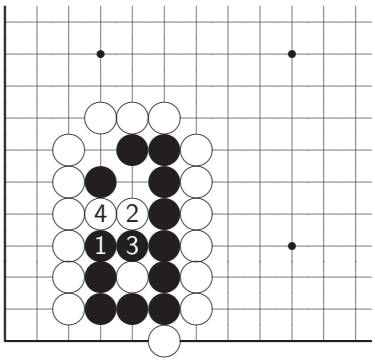

4
2 1
3

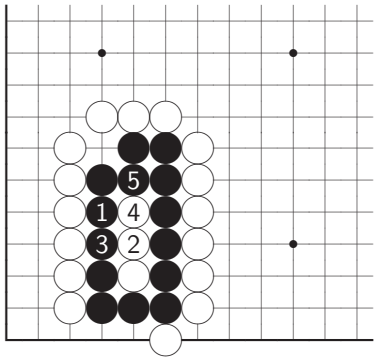

2
3 1

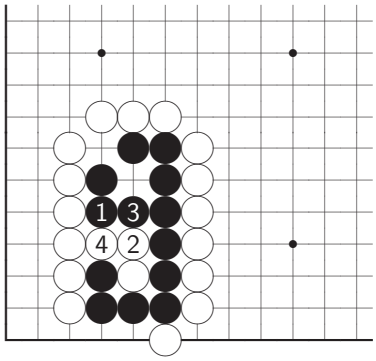

4
2 3
1

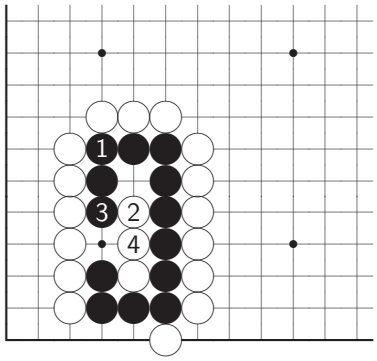

3
2 4
1

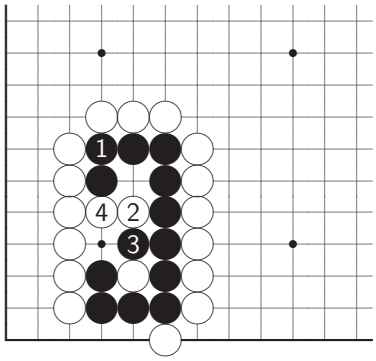

5
3 2
1 4

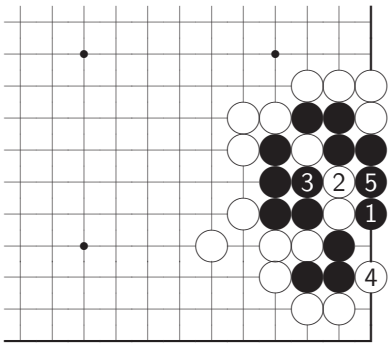

4 2
1 3

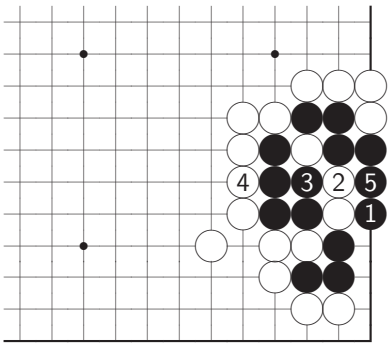

5
1 4
3 2

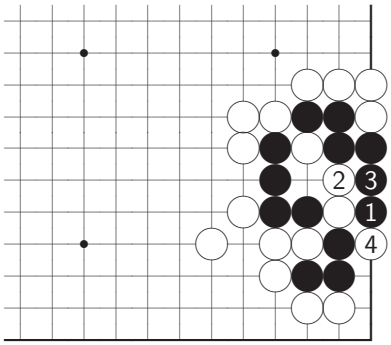

1 3
4 2

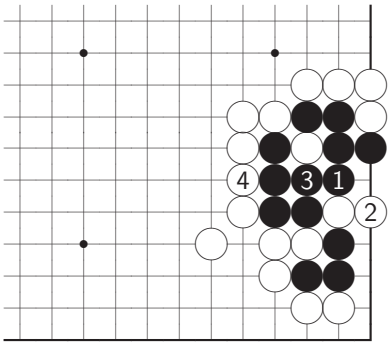

1
3 2
4

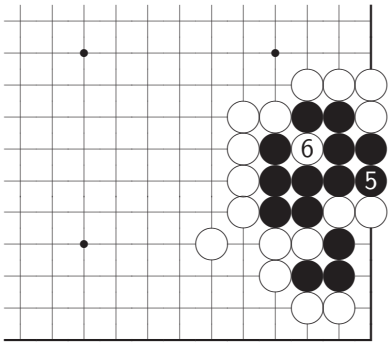

1
4 2
3

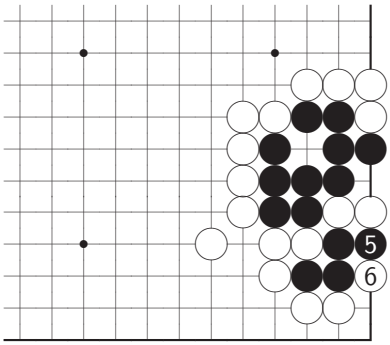

3 2 5
1
4

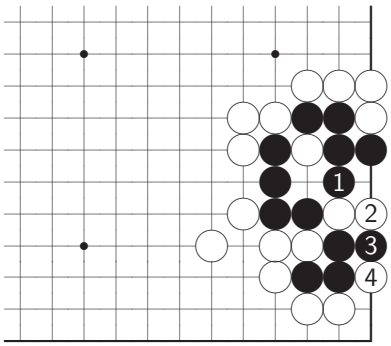

4 3 2 5
1

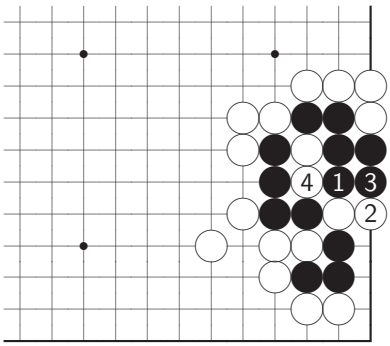

2
3
1
4

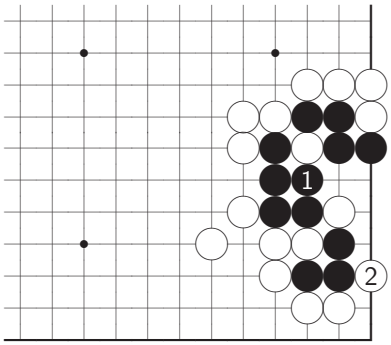

4
3
1
2

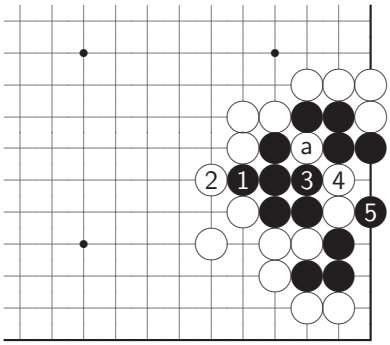

6
5

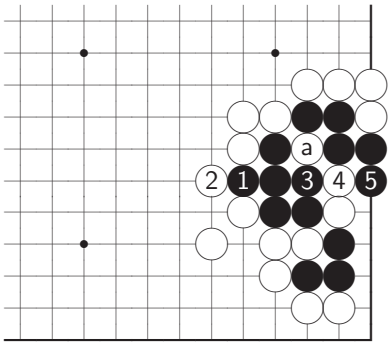

5
6

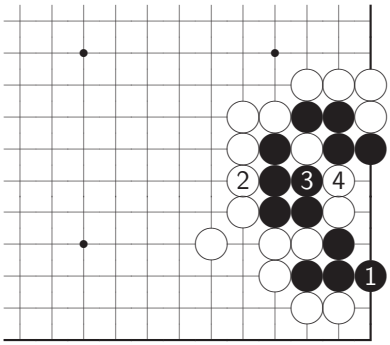

1
2
3
4

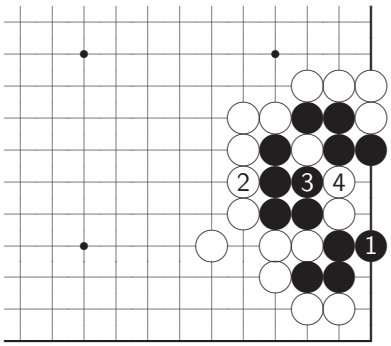

4
1
3
2

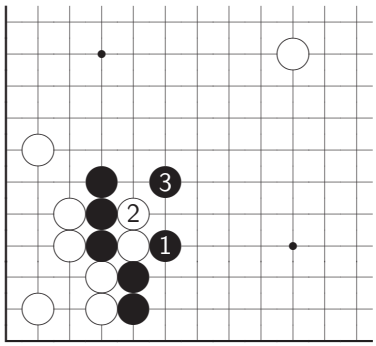

1
2

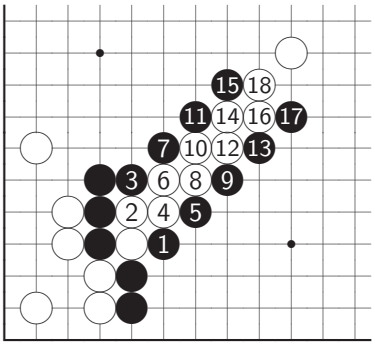

a
2
1
3
4
5

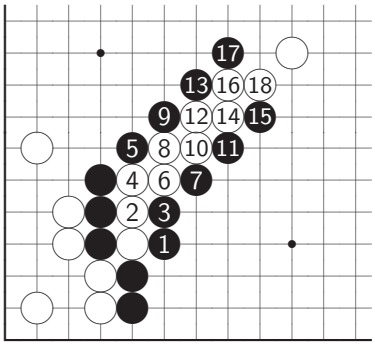

a
2
1
3
4
5

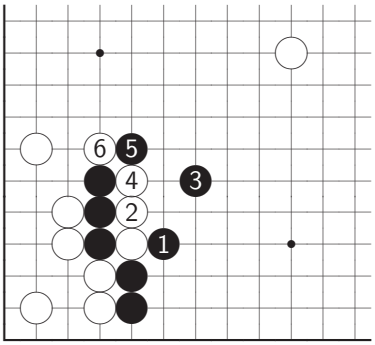

2
3
4
1

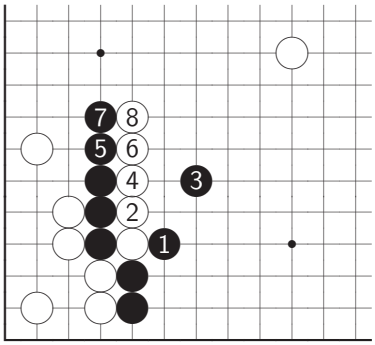

2
3
4
1

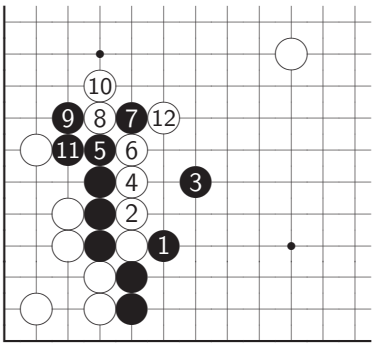

3
2
1

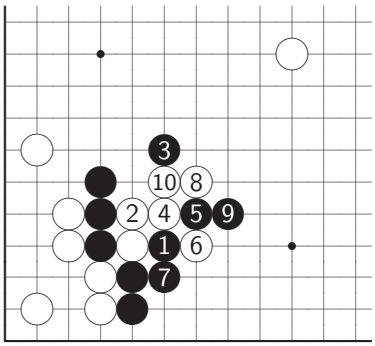

15 18
11 14 16 17
7 10 12 13
3 6 8 9
2 4 5
1

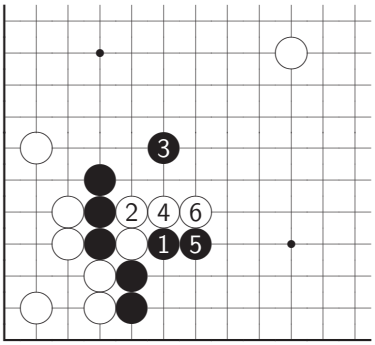

17
13 16 18
9 12 14 15
5 8 10 11
4 6 7
2 3
1

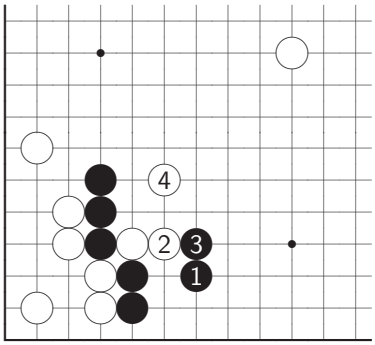

6 5
4 3
2
1

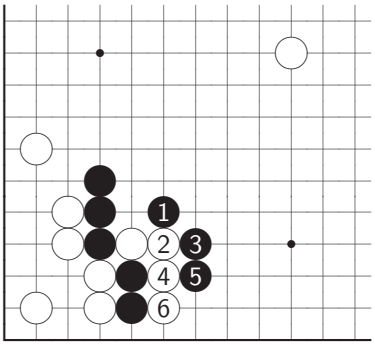

7 8
5 6
4 3
2
1

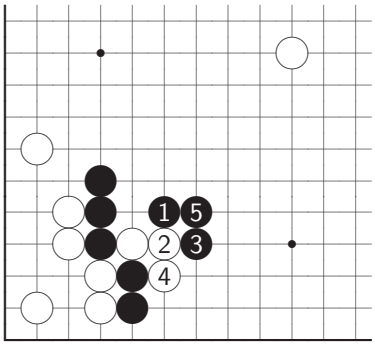

10
9 8 7 12
11 5 6
4 3
2
1

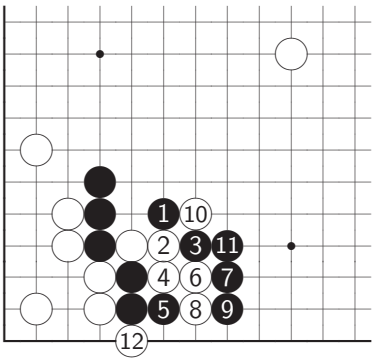

3
10 8
2 4 5 9
1 6
7

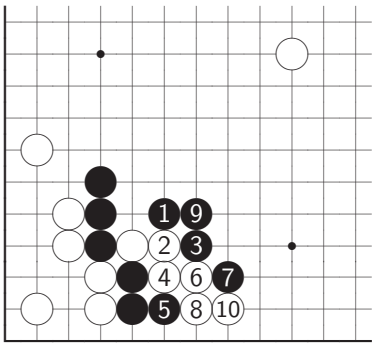

3
2 4 6
1 5

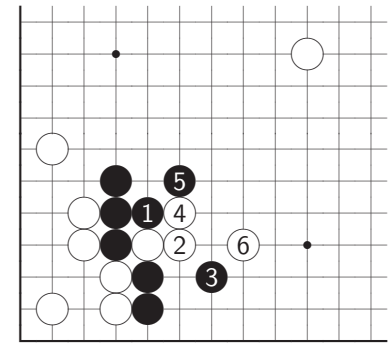

4
2 3
1

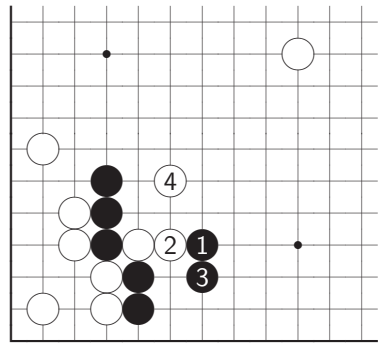

1
2 3
4 5
6

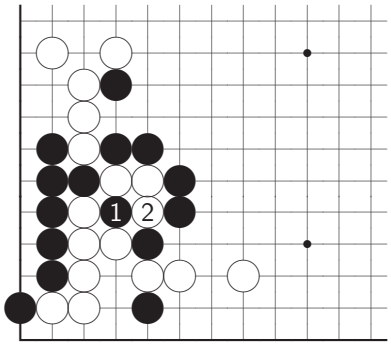

1 5
2 3
4

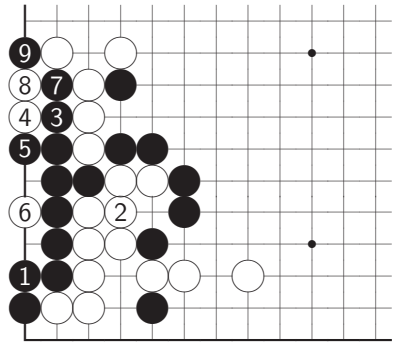

1 10
2 3 11
4 6 7
5 8 9
12

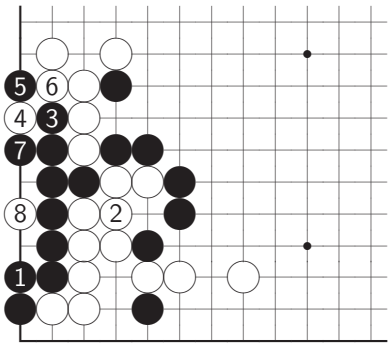

1 9
2 3
4 6 7
5 8 10

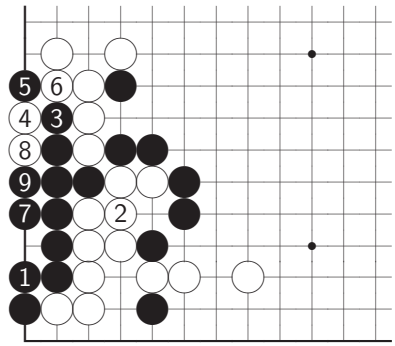

5
1 4
2 6
3

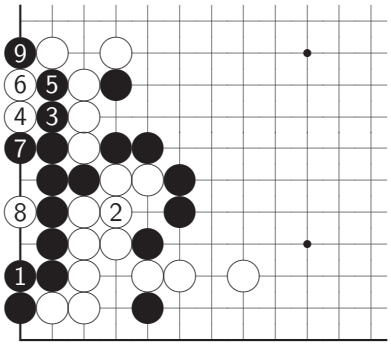

4
2 1
3

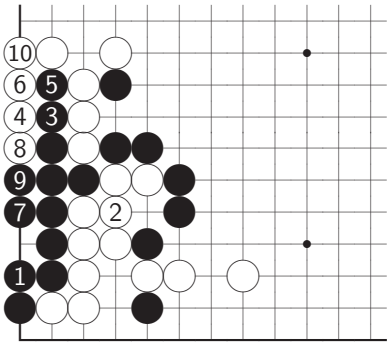

1 2

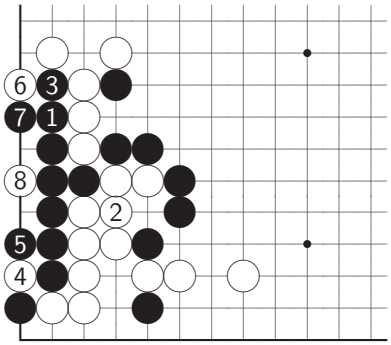

9
8 7
4 3
5
6 2
1

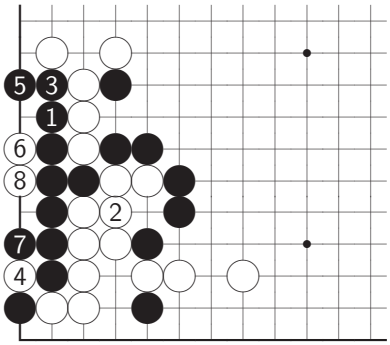

5 6
4 3
7
8 2
1

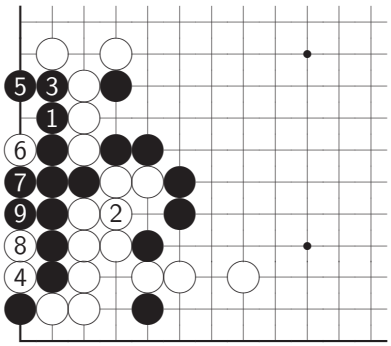

5 6
4 3
8
9
7 2
1

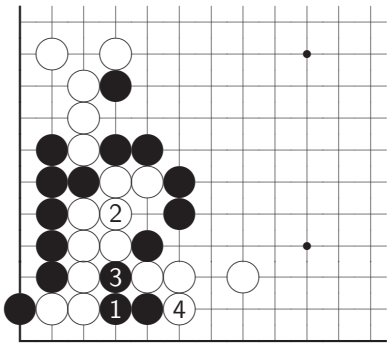

9
6 5
4 3
7
8 2
1

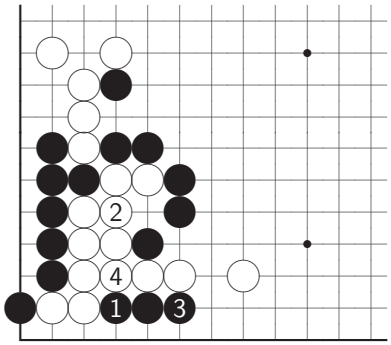

10
6 5
4 3
8
9
7 2
1

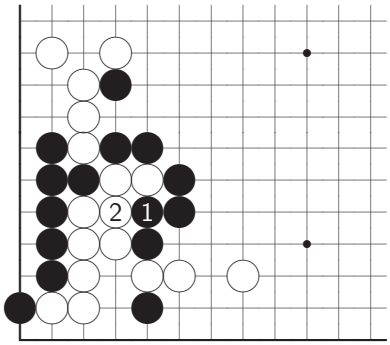

6 3
7 1
8
2
5
4

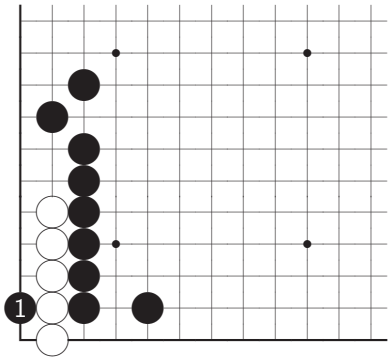

5 3
1
6
8
2
7
4

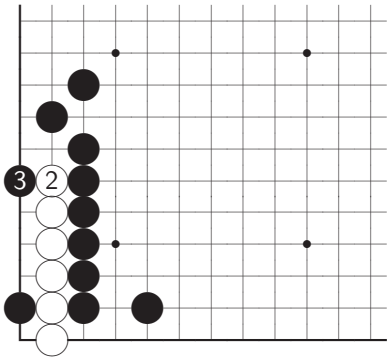

5 3
1
6
7
9 2
8
4

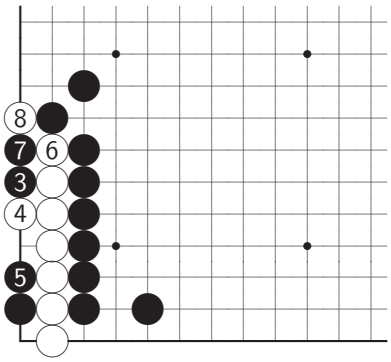

2
3
1 4

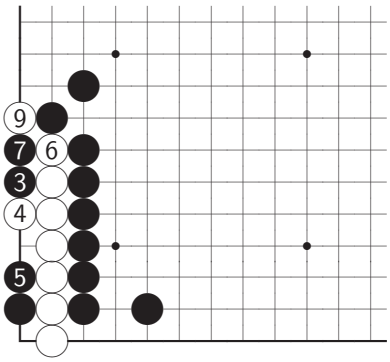

2
4
1
3

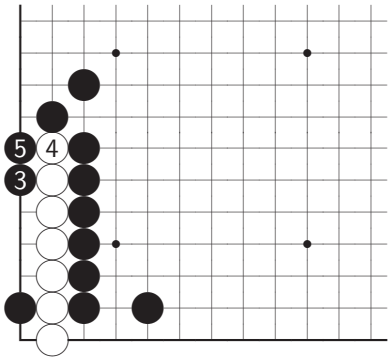

2
1

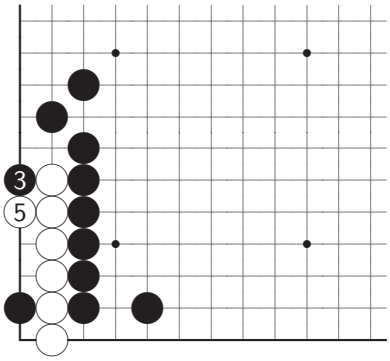

1

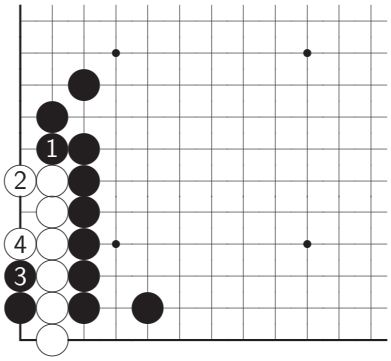

3
2

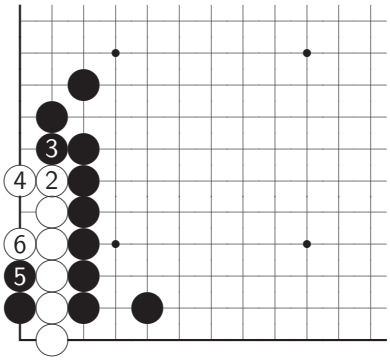

8
7
6
3
4
5

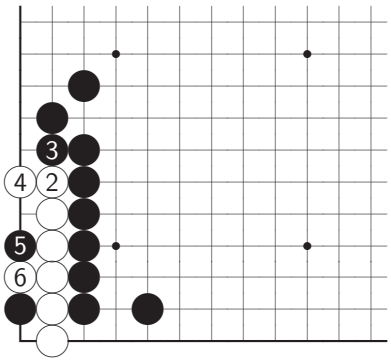

9
7
6
3
4
5

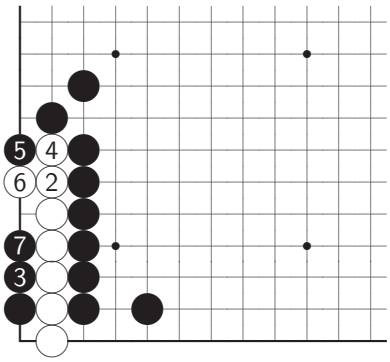

5 4
3

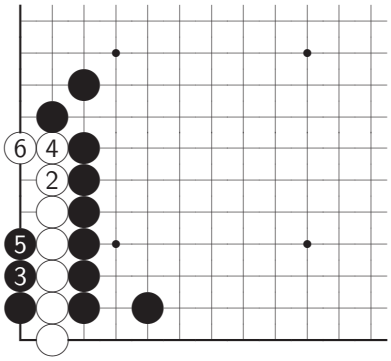

3
5

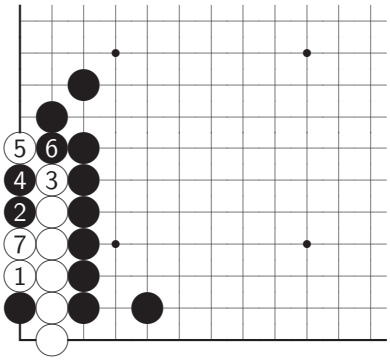

1
2
4
3

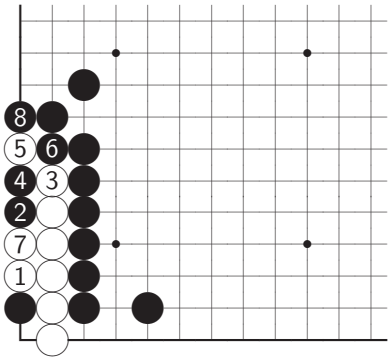

3
4 2
6
5

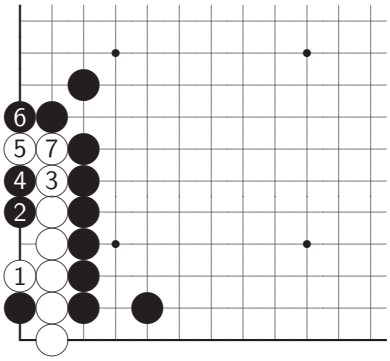

3
4 2
5
6

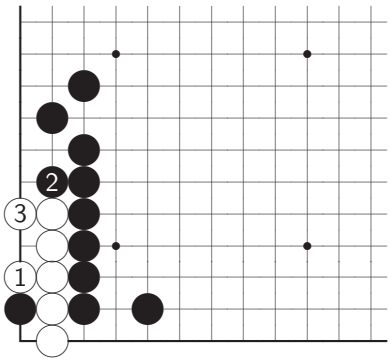

5 4
6 2
7
3

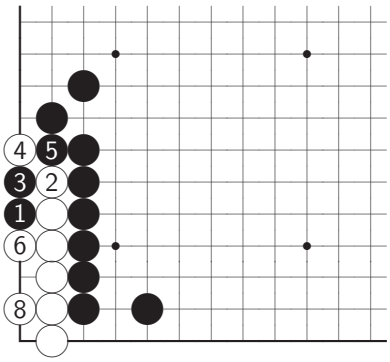

6 4
2
5
3

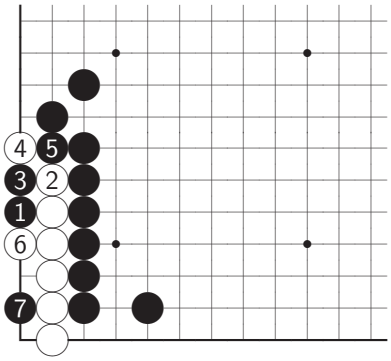

5 6
4 3
2
7
1

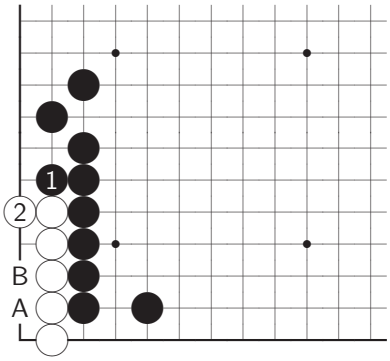

8
5 6
4 3
2
7
1

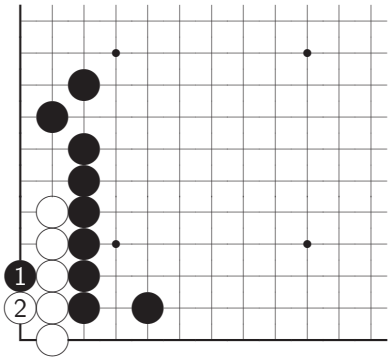

6
5 7
4 3
2
1

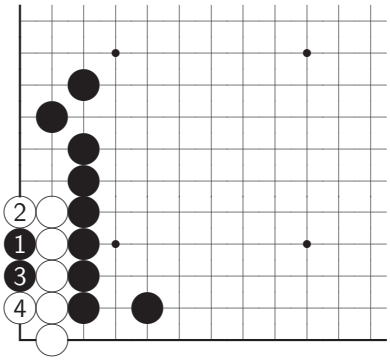

2
3
1

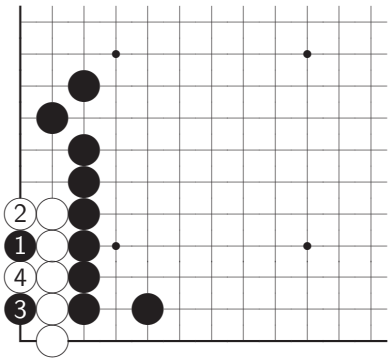

4 5
3 2
1
6
8

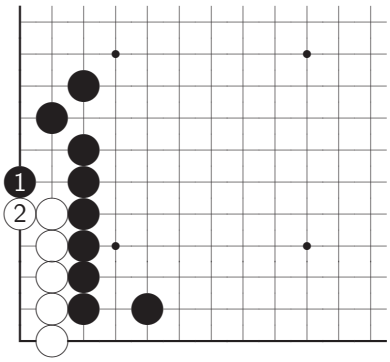

4
5
3
2
1
6
7

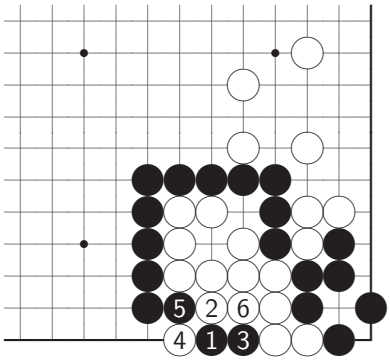

1
2
B
A

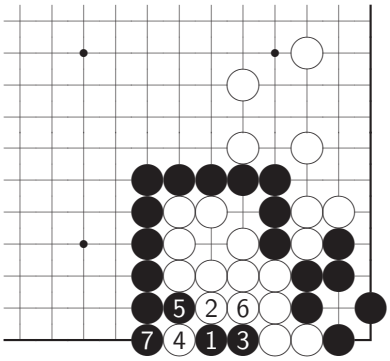

1
2

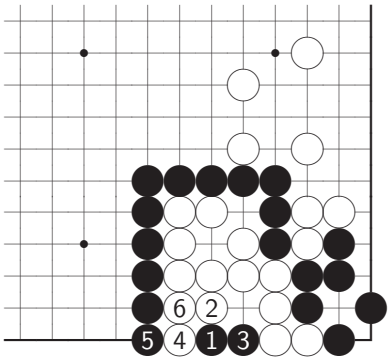

2
1
3
4

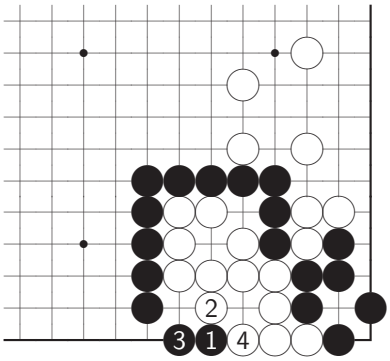

2
1
4
3

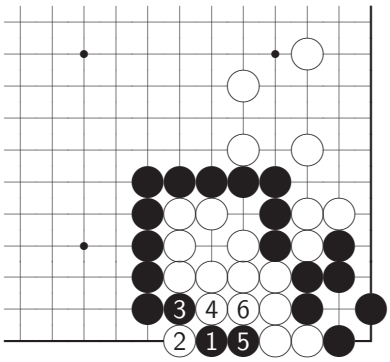

1
2

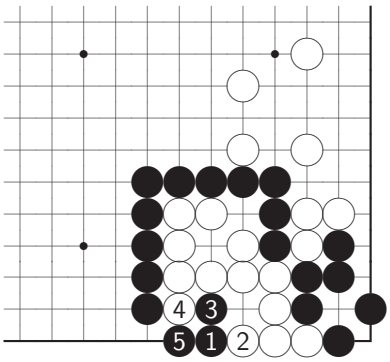

5 2 6
4 1 3

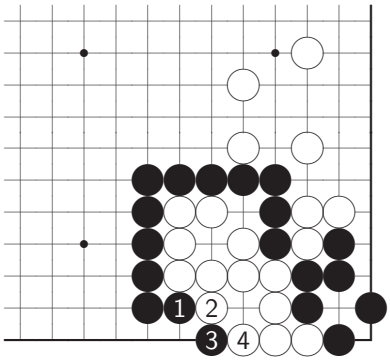

5 2 6
7 4 1 3

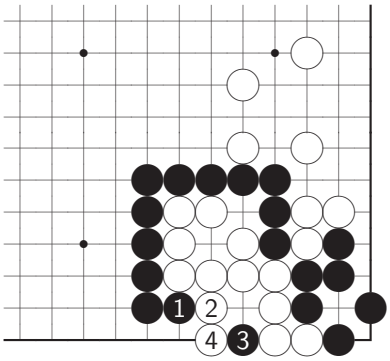

6 2
5 4 1 3

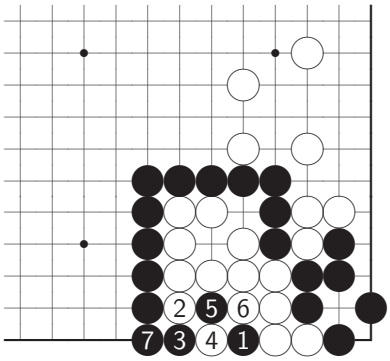

2
3 1 4

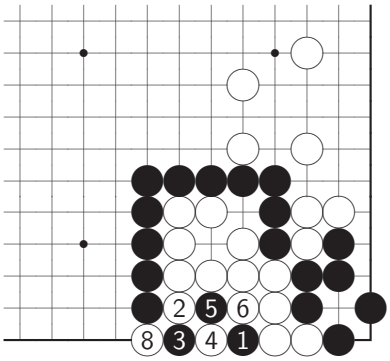

3 4 6
2 1 5

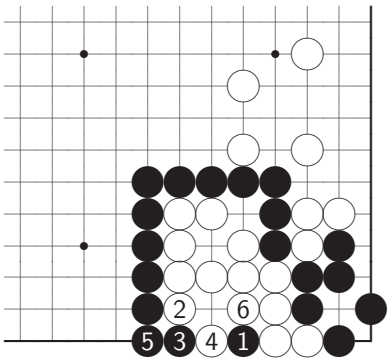

4 3
5 1 2

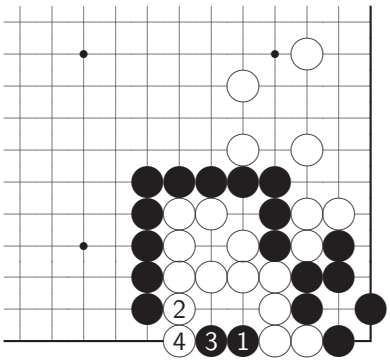

1 2
3 4

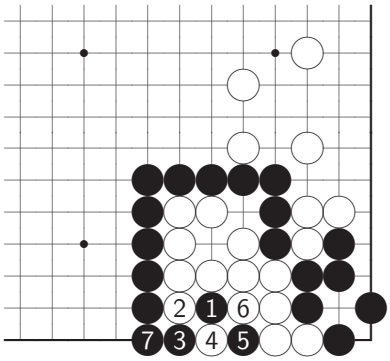

1 2
4 3

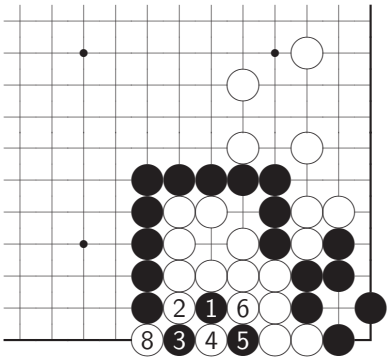

2 5 6
7 3 4 1

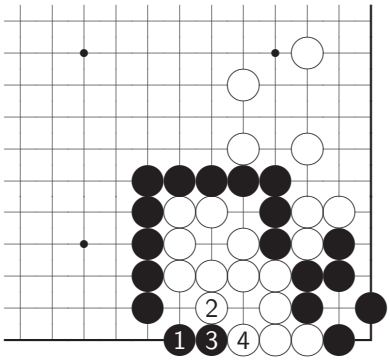

2 5 6
8 3 4 1

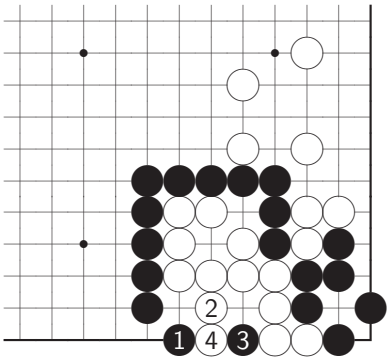

2 6
5 3 4 1

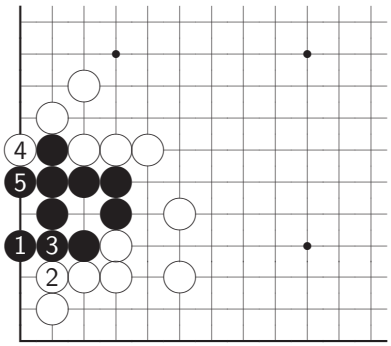

2
4 3 1

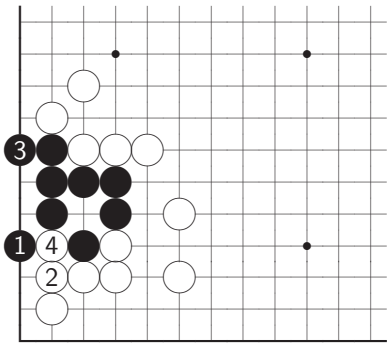

2 1 6
7 3 4 5

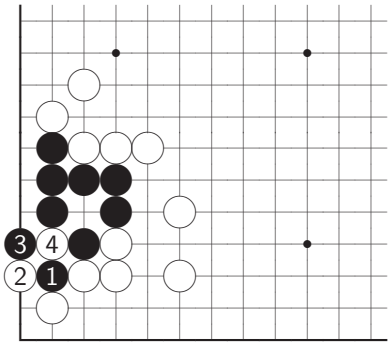

2 1 6
8 3 4 5

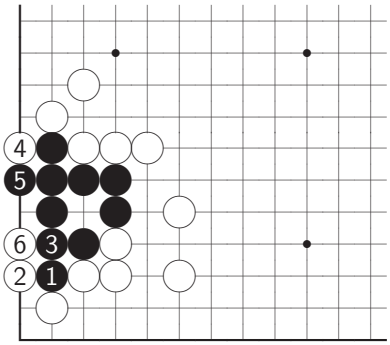

2
1 3 4

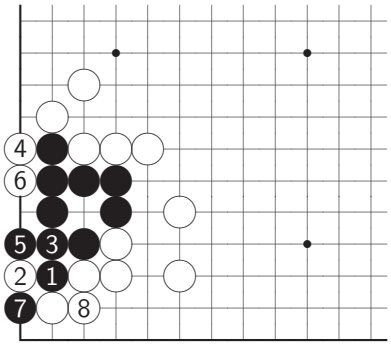

2
1 4 3

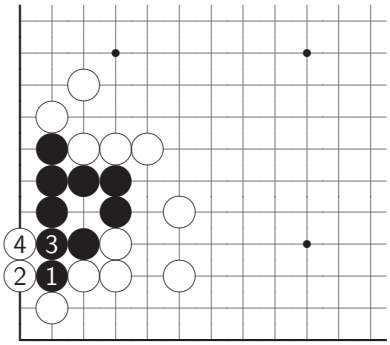

4
5
1 3
2

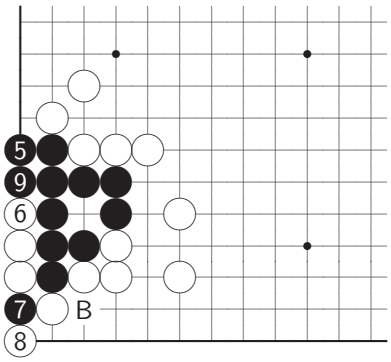

3
1 4
2

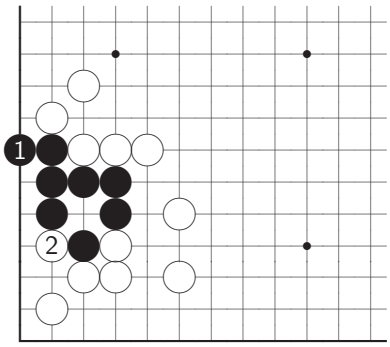

3 4
2 1

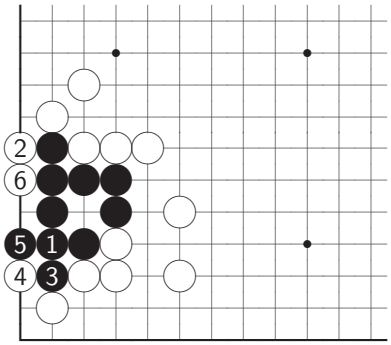

4
5
6 3
2 1

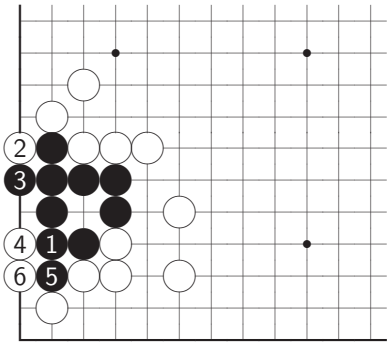

4
6
5 3
2 1
7 8

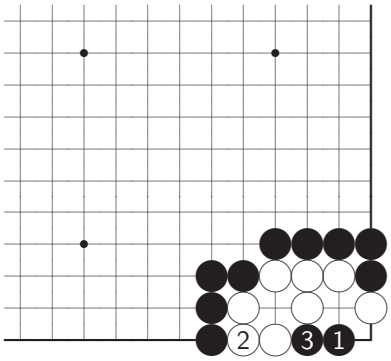

4 3
2 1

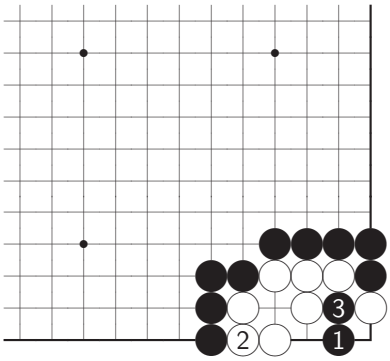

5
9
6
7 B
8

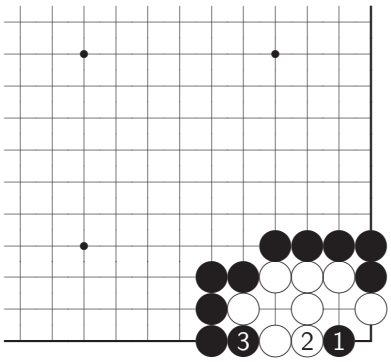

1
2

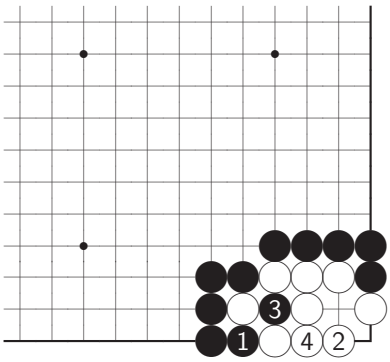

2
6
5 1
4 3

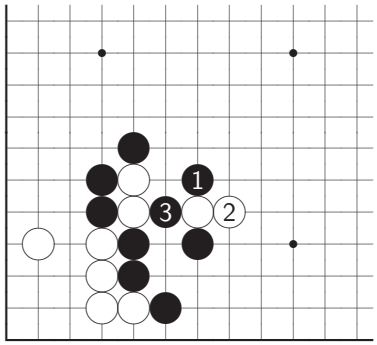

2
3
4 1
6 5

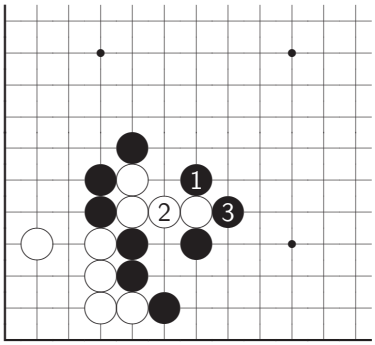

2 3 1

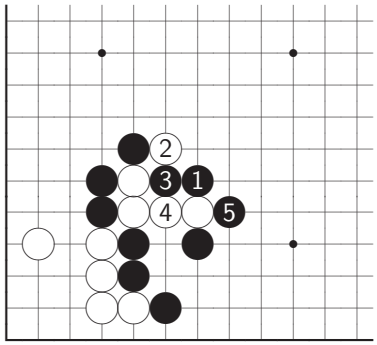

3
2 1

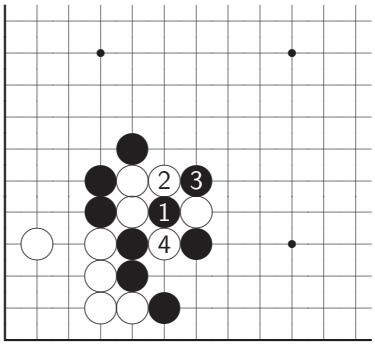

3 2 1

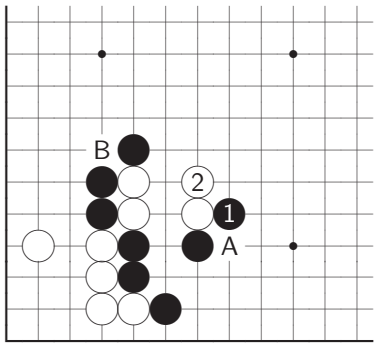

3
1 4 2

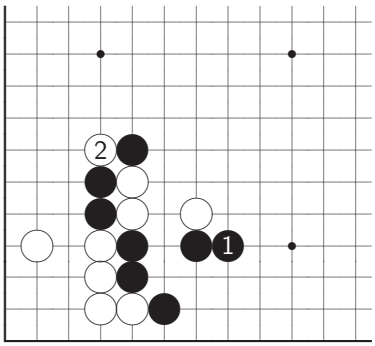

1
3
2

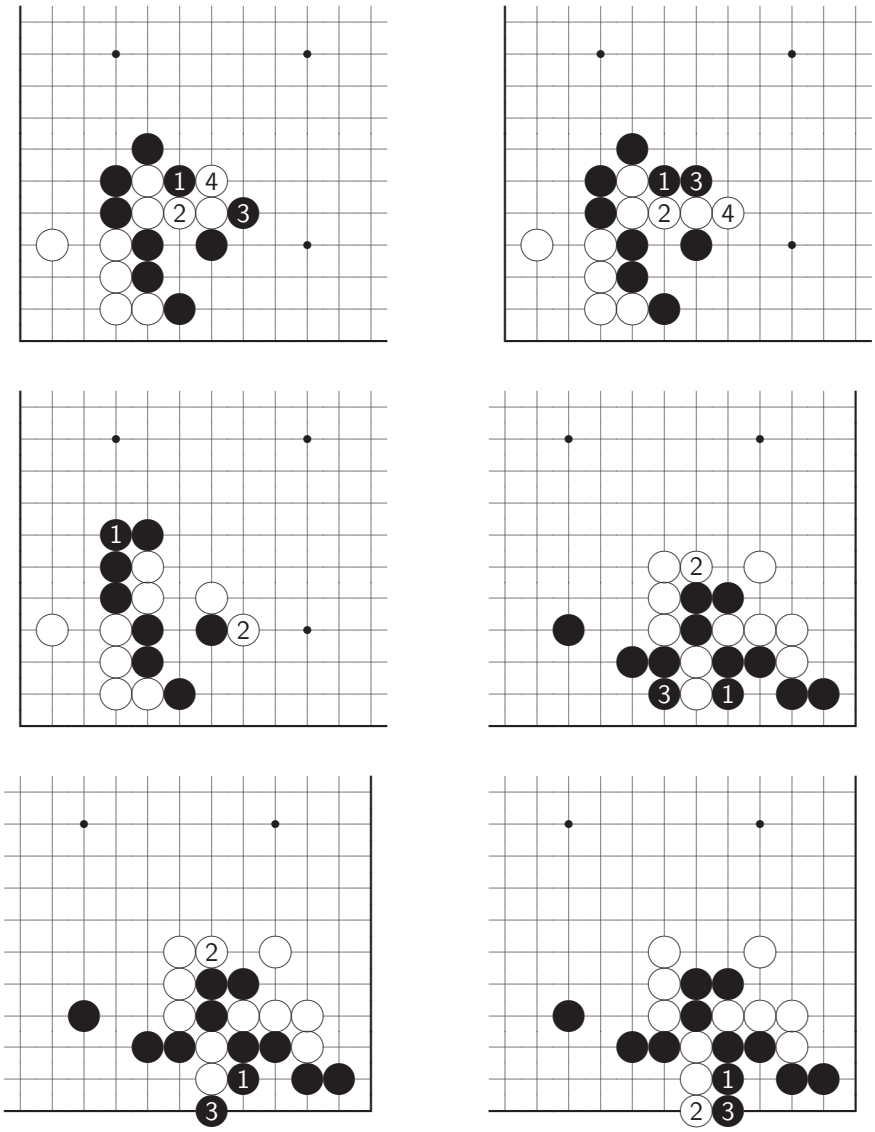

1
2
3

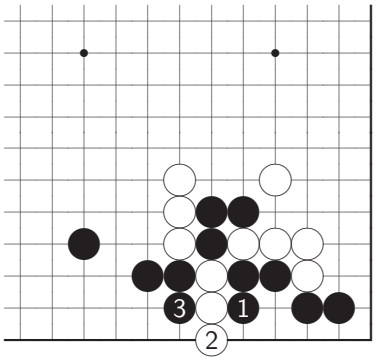

2
3
1
4
5

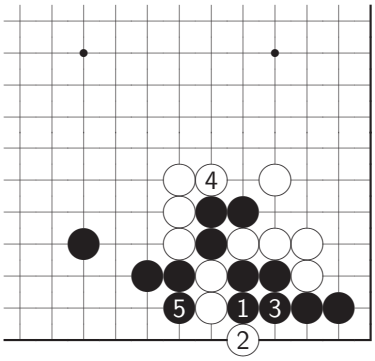

2
3
1
4

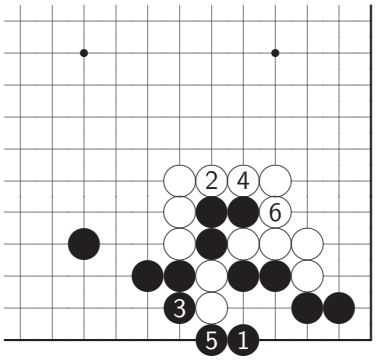

B
2
1
A

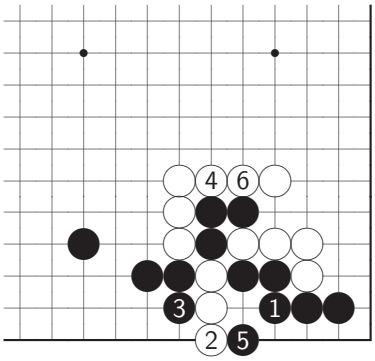

2
1

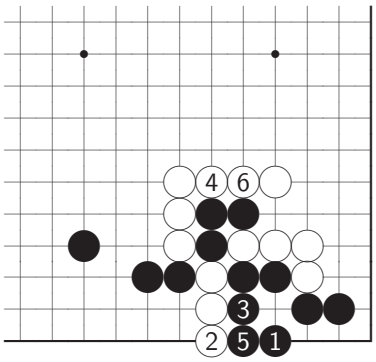

1 4
2 3
1 3
2 4
1
2
2
3 1
2
3
1
2 3

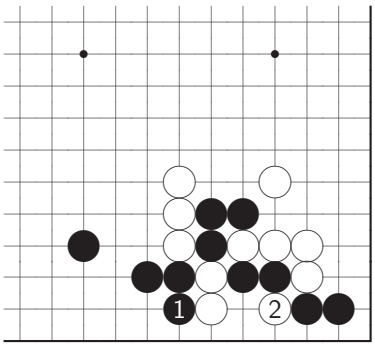

3
1
2

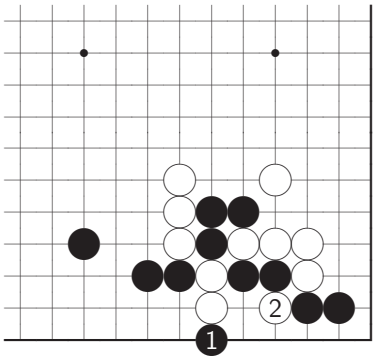

4
5
1
3
2

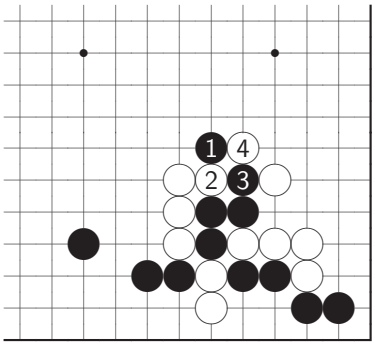

2
4
6
3
5
1

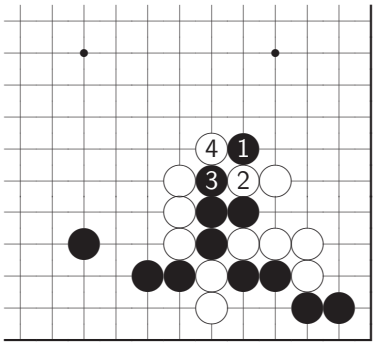

4
6
3
1
2
5

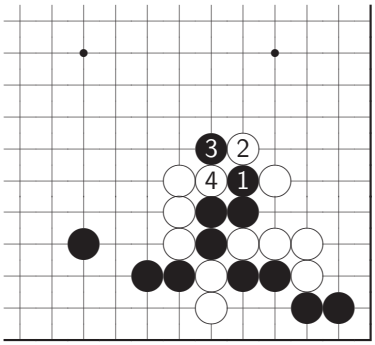

4
6
3
2
5
1

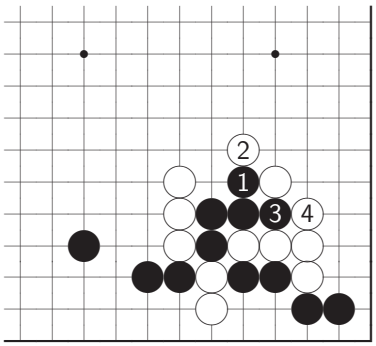

1
2

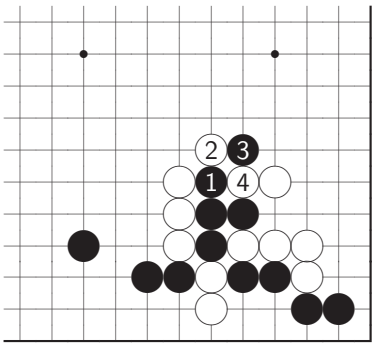

2
1

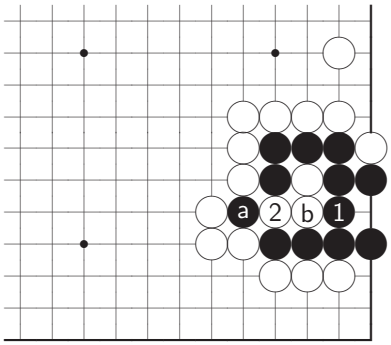

1 4
2 3

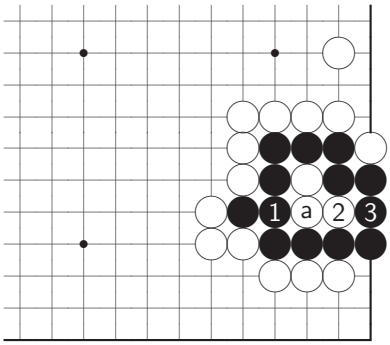

4 1
3 2

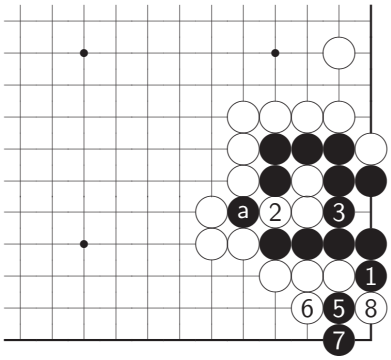

3 2
4 1

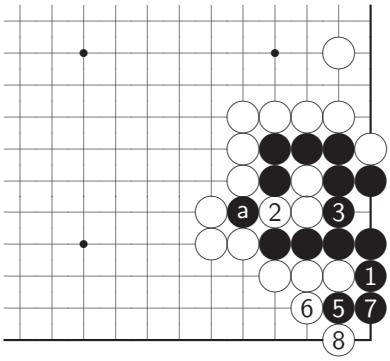

2
1
3 4

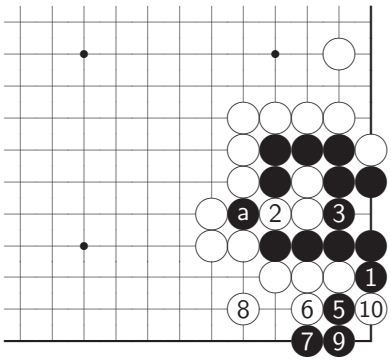

2 3
1 4

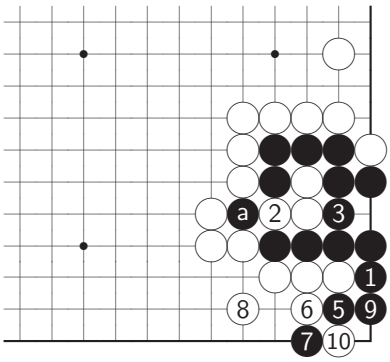

a 2 b 1

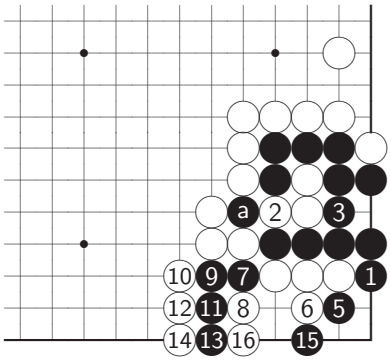

1 a 2 3

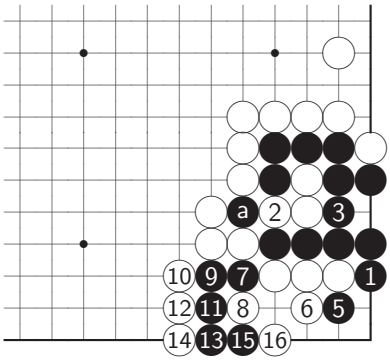

a 2 3
1
6 5 8
7

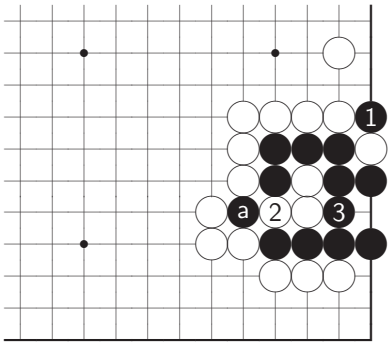

a 2 3
1
6 5 7
8

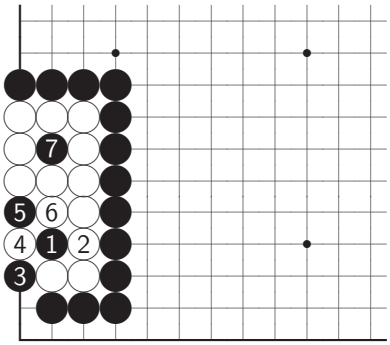

a 2 3
1
8 6 5 10
7 9

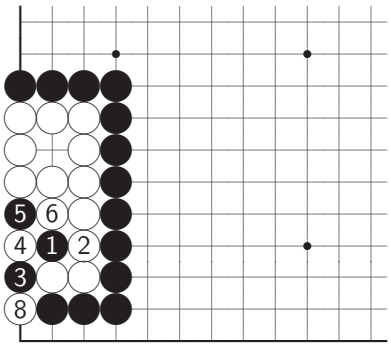

a 2 3
1
8 6 5 9
7 10

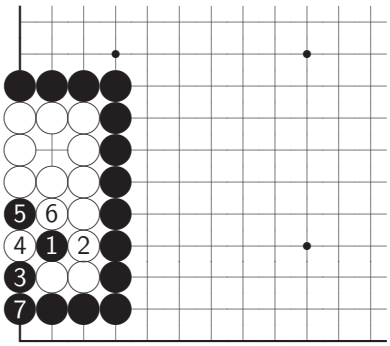

a 2 3
10 9 7 1
12 11 8 6 5
14 13 16 15

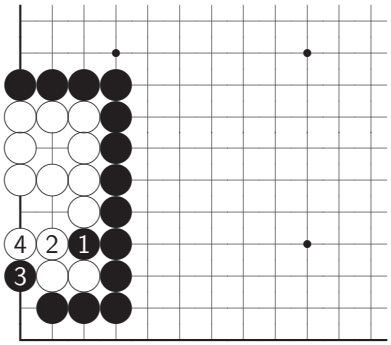

a 2 3
10 9 7 1
12 11 8 6 5
14 13 15 16

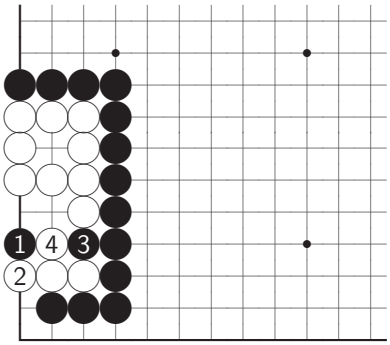

1
a 2 3

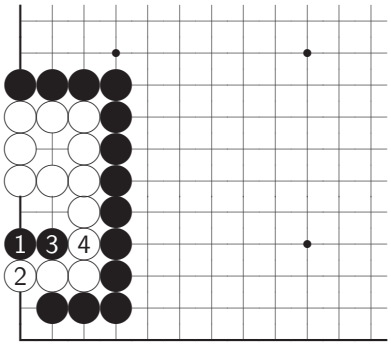

7
5 6
4 1 2
3

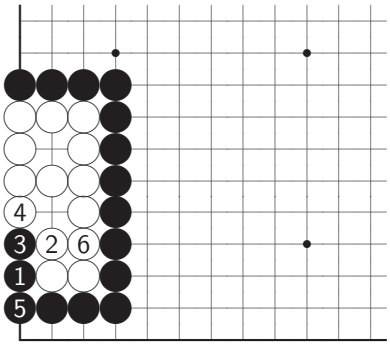

5 6
4 1 2
3
8

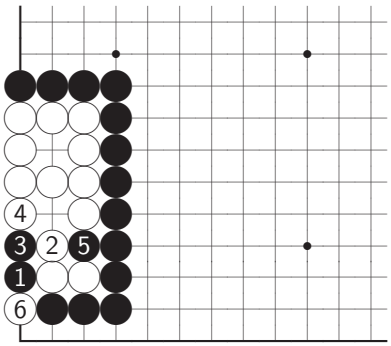

5 6
4 1 2
3
7

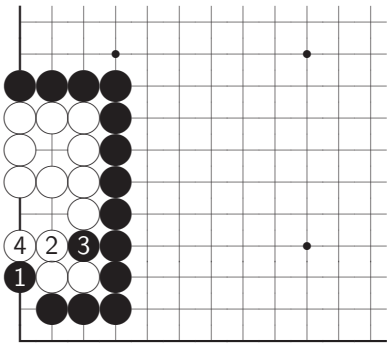

4 2 1
3

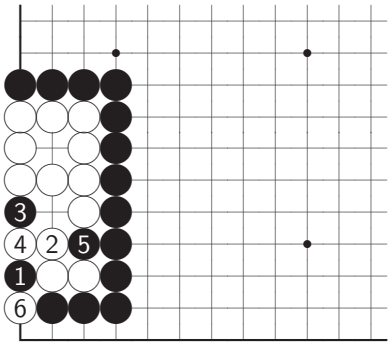

1 4 3
2

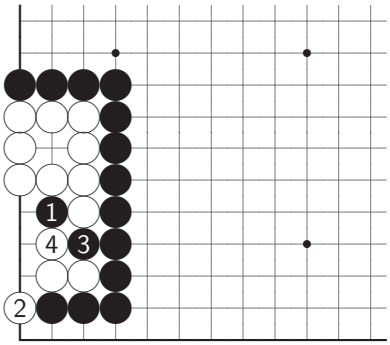

1 3 4
2

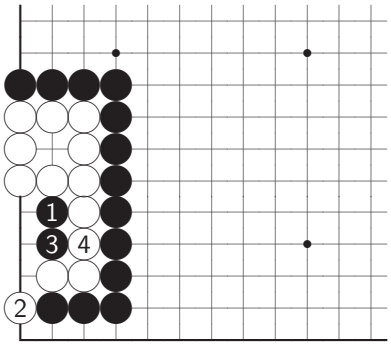

4
3 2 6
1
5

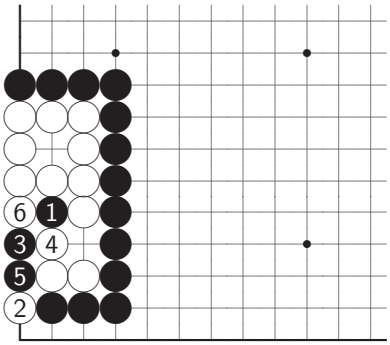

4
3 2 5
1
6

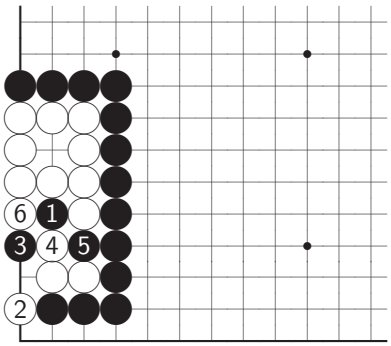

4 2 3
1

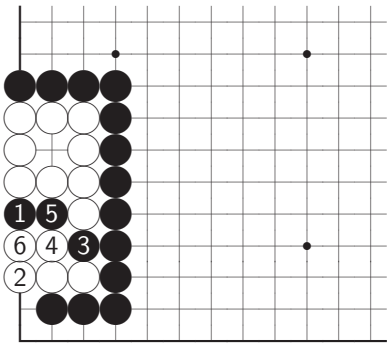

3
4 2 5
1
6

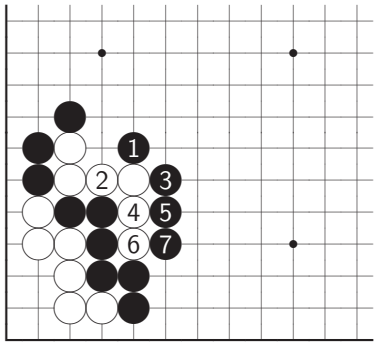

1
4 3
2

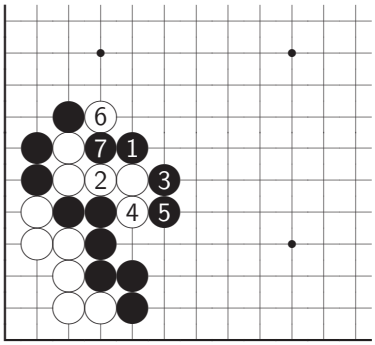

1
3 4
2

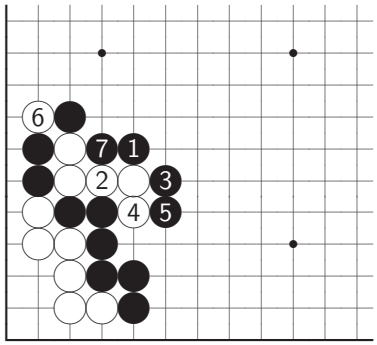

6 1
3 4
5
2

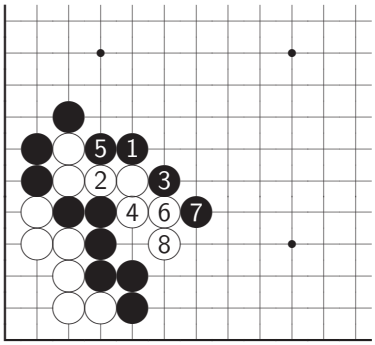

6 1
3 4 5
2

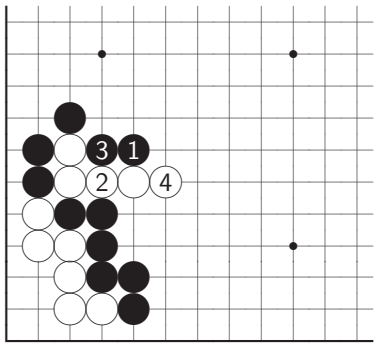

1 5
6 4 3
2

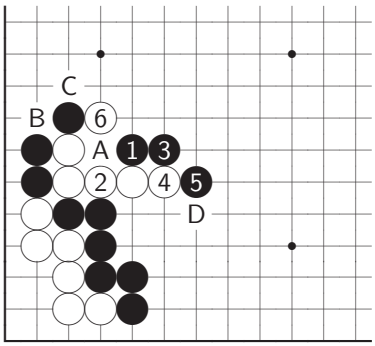

1
2
3
4
5
6
7

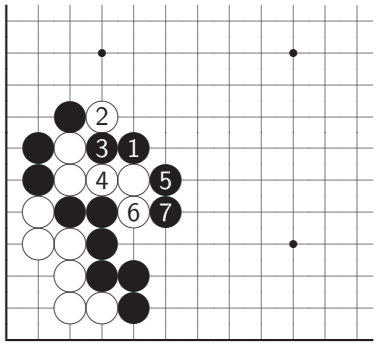

6
7
1
2
3
4
5

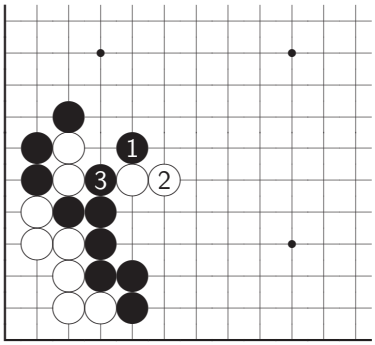

6
7
1
2
3
4
5

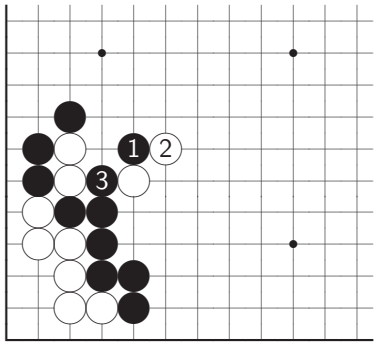

5
1
2
3
4
6
7
8

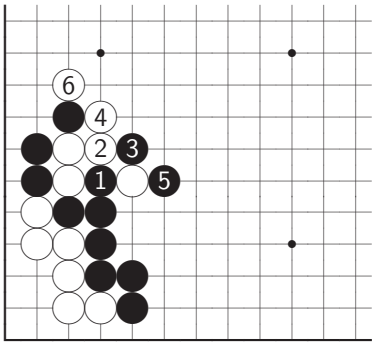

3
1
2
4

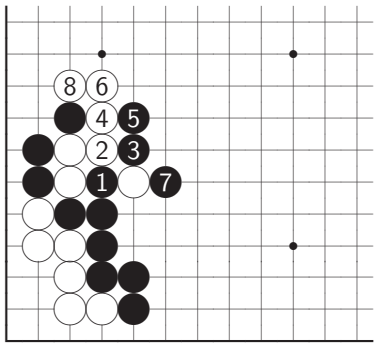

C
B
6
A
1
3
2
4
5
D

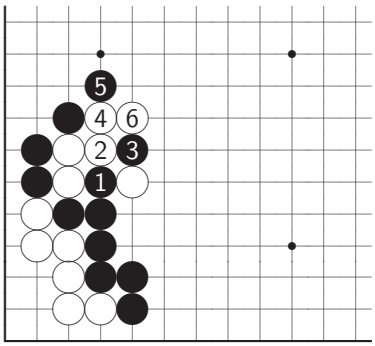

2
3 1
4 5
6 7

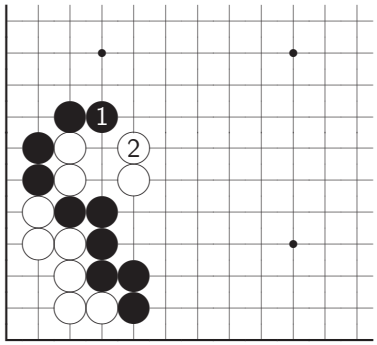

1
3 2

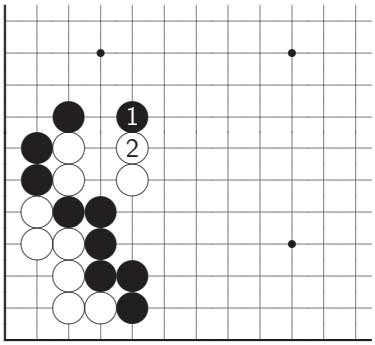

1 2
3

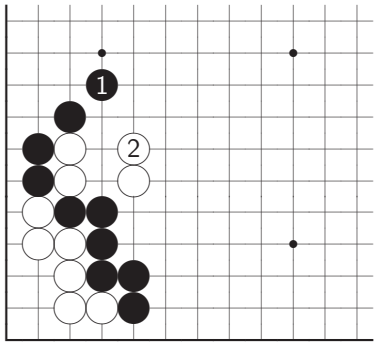

6
4
2 3
1 5

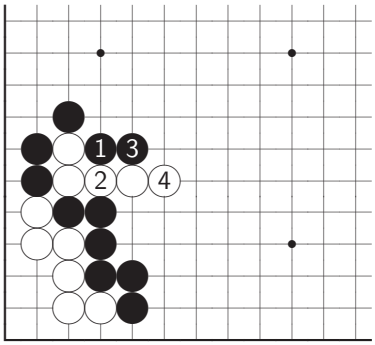

8 6
4 5
2 3
1 7

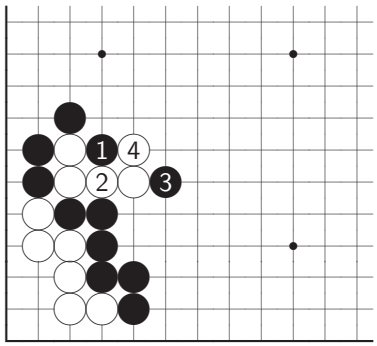

5
4 6
2 3
1

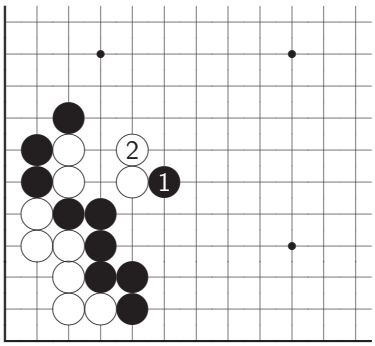

1
2

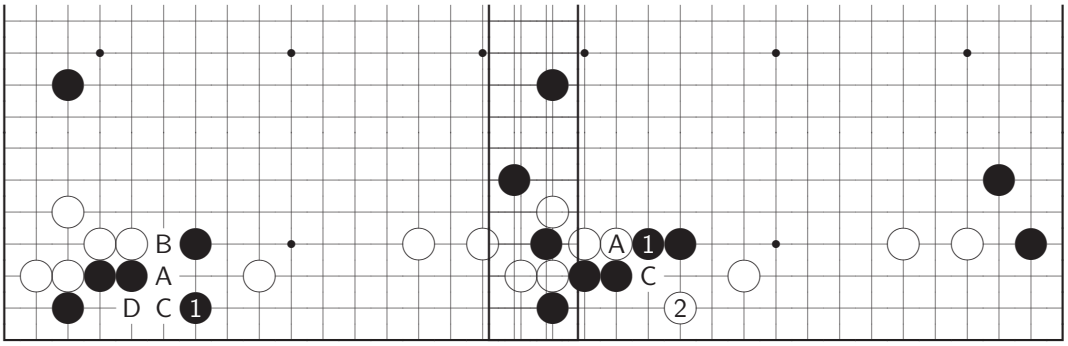

1
2

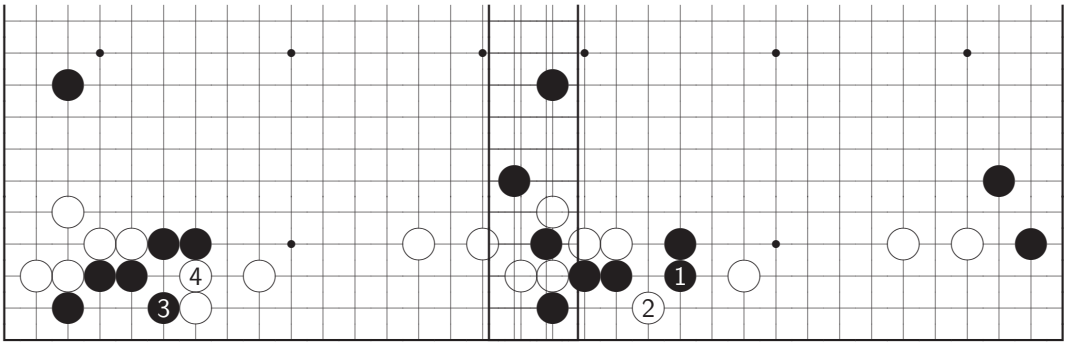

1
2

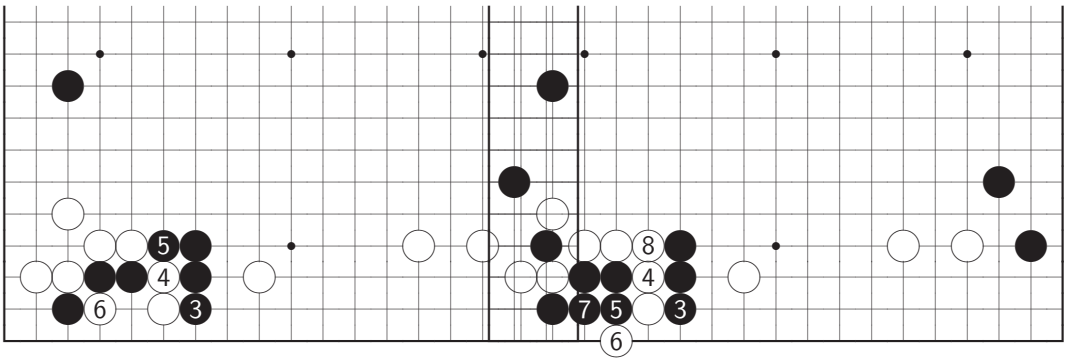

1 3
2 4

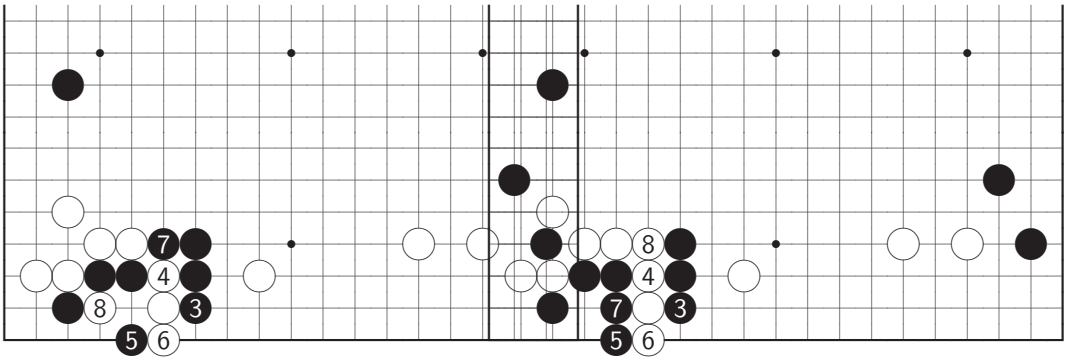

1 4
2 3

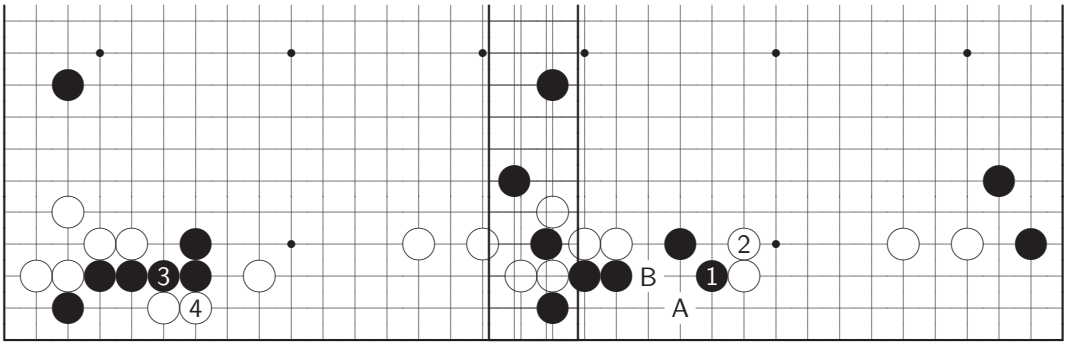

2
1

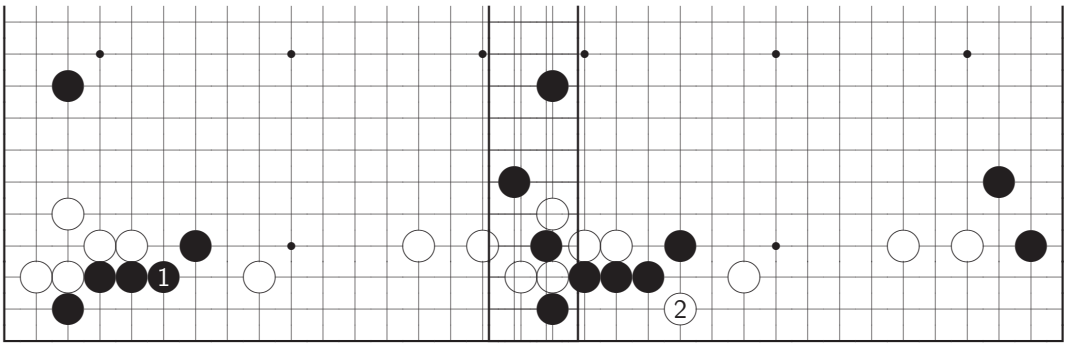

B
A
D C 1
A 1
C
2

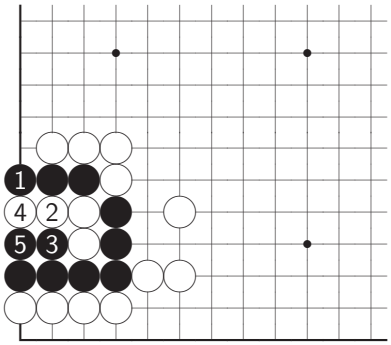

4
3
1
2

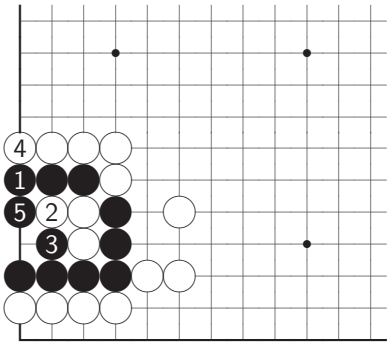

5
4
6
3
8
4
7 5
3
6

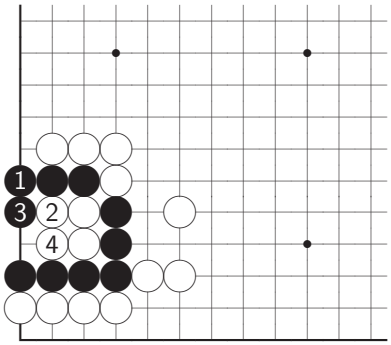

7
4
8
3
5
6
8
4
7
3
5
6

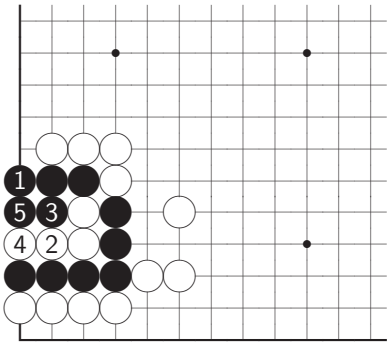

3
4
2
B
1
A

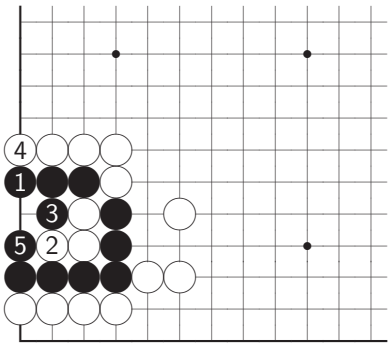

1
2

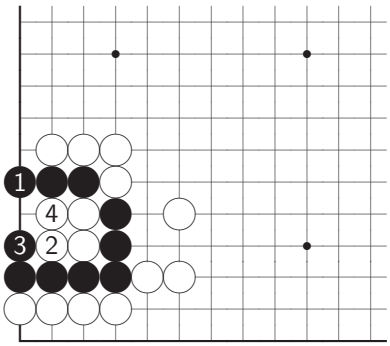

1
4 2
5 3

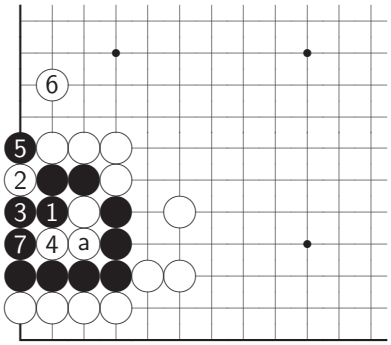

4
1
5 2
3

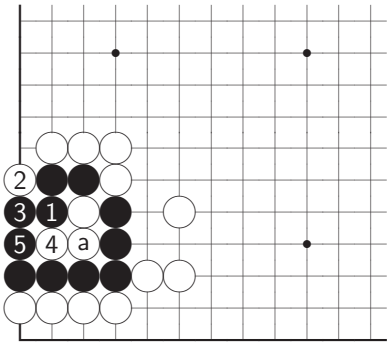

1
3 2
4

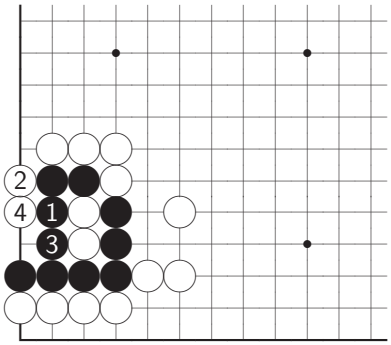

1
5 3
4 2

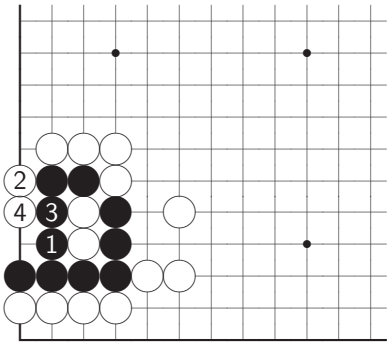

4
1
3
5 2

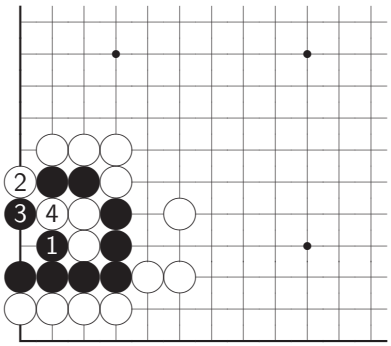

1
4
3 2

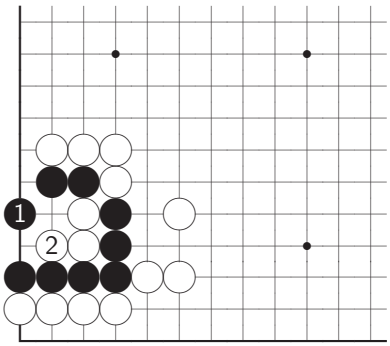

6
5
2
3 1
7 4 a

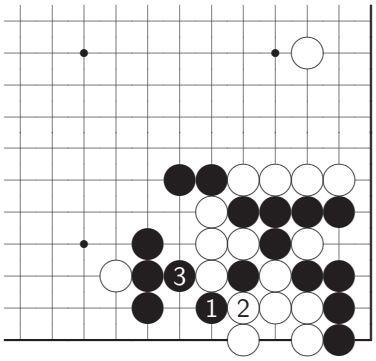

2
3 1
5 4 a

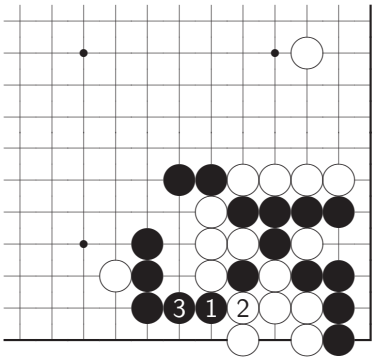

2
4 1
3

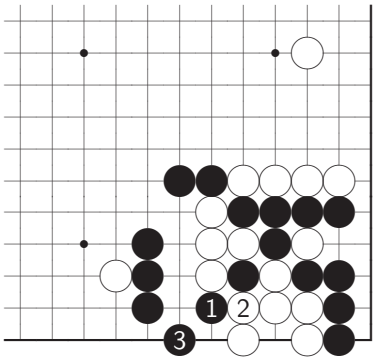

2
4 3
1

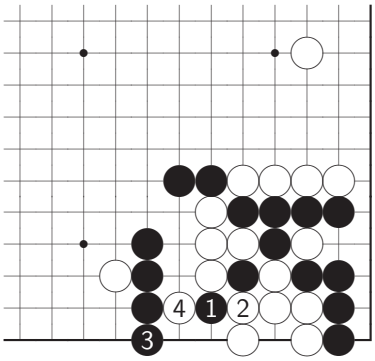

2
3 4
1

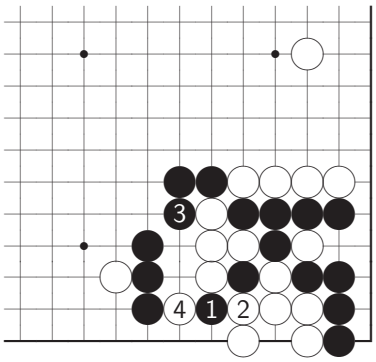

1
2

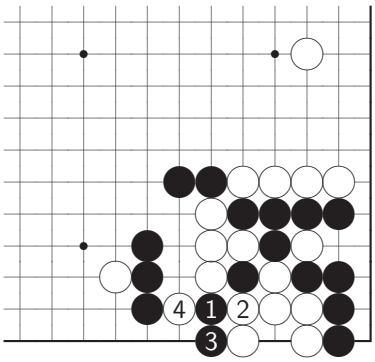

3
1
2

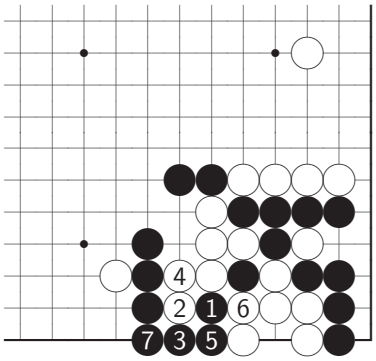

3
1
2

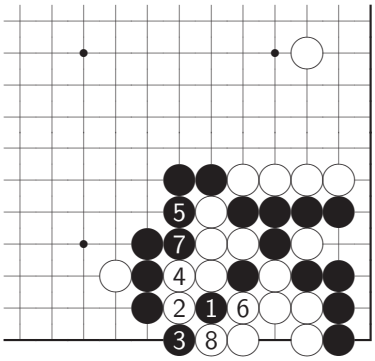

1
2
3

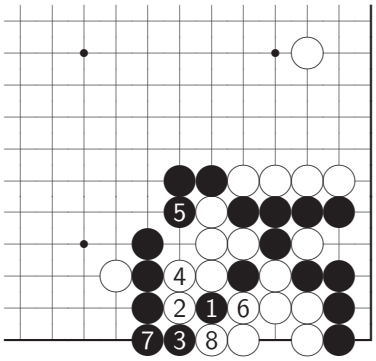

4
1
2
3

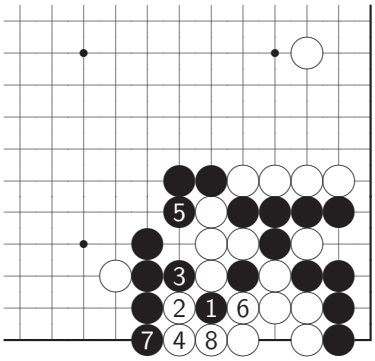

3
4
1
2

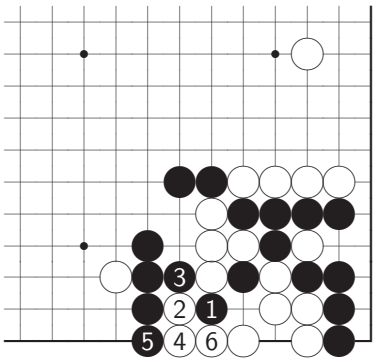

4
1
2
3

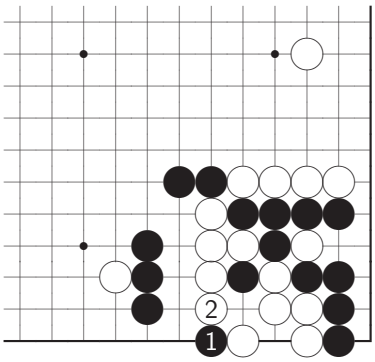

4
2 1 6
7 3 5

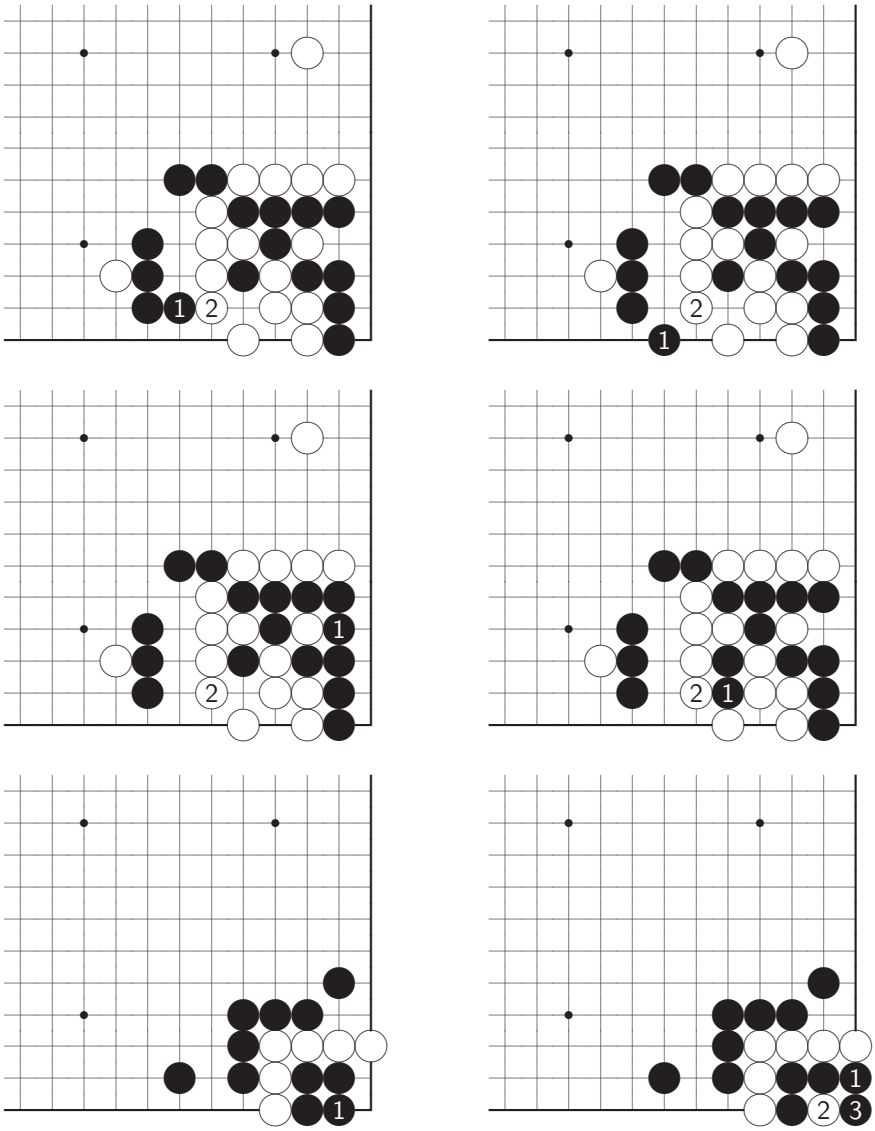

5
7
4
2 1 6
3 8

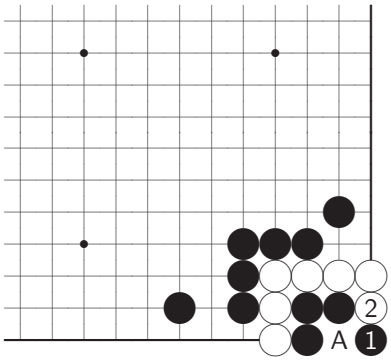

5
4
2 1 6
7 3 8

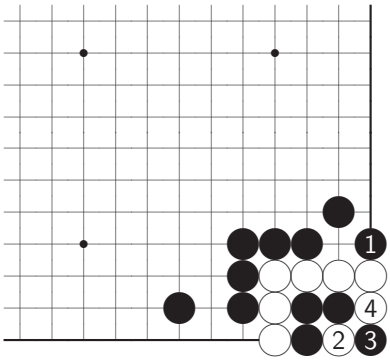

5
3
2 1 6
7 4 8

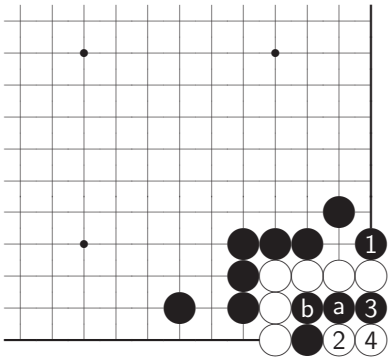

3
2 1
5 4 6

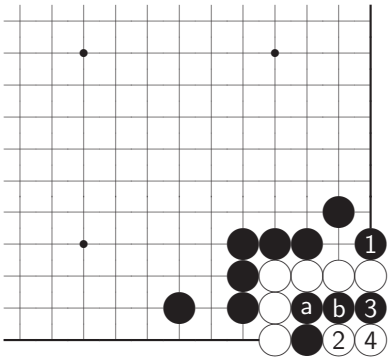

2
1

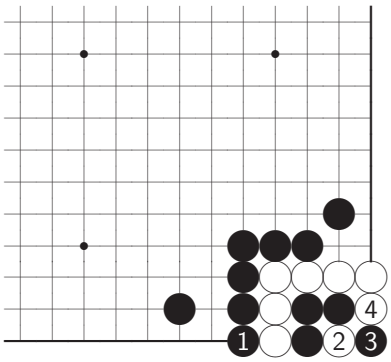

1 2
2 1
1 2
2 1
1
2 3

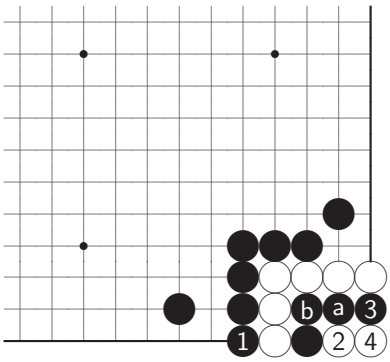

2
A
1

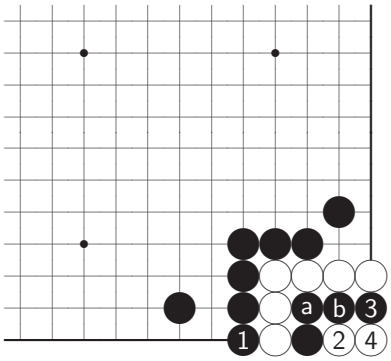

1
4
2
3

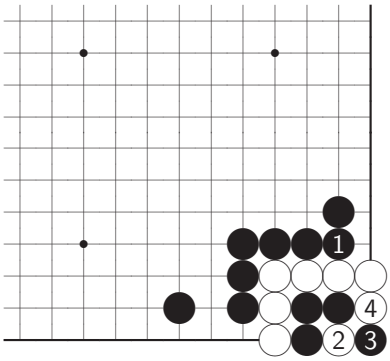

1
b
a
3
2
4

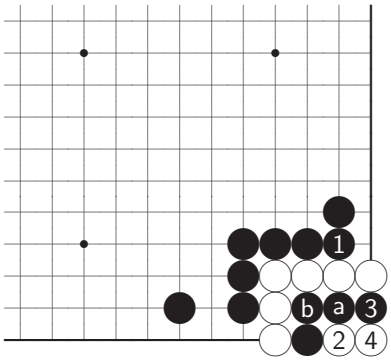

1
a
b
3
2
4

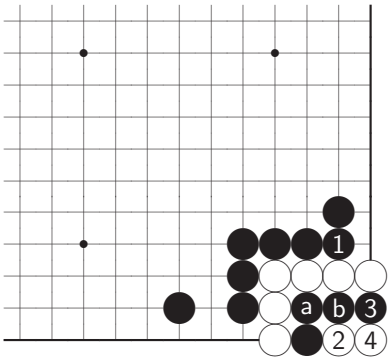

4
1
2
3

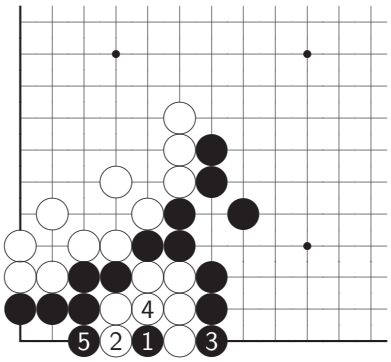

b
a
3
1
2
4

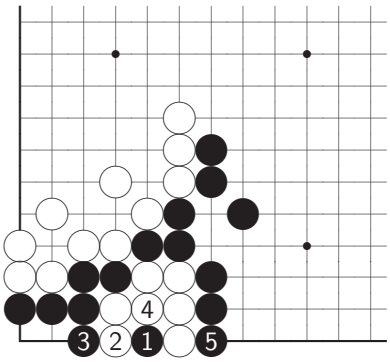

a
b
3
1
2
4

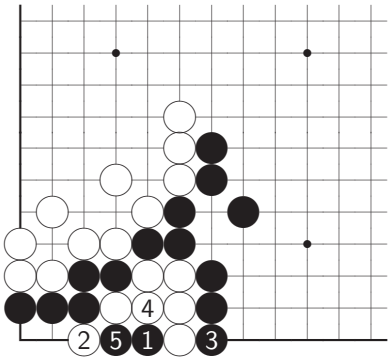

1
4
2
3

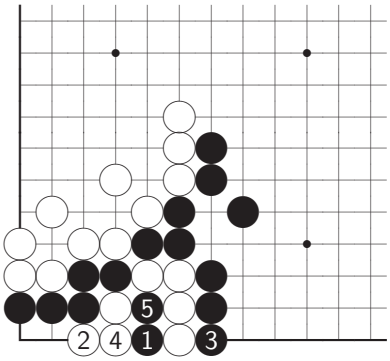

1
b
a
3
2
4

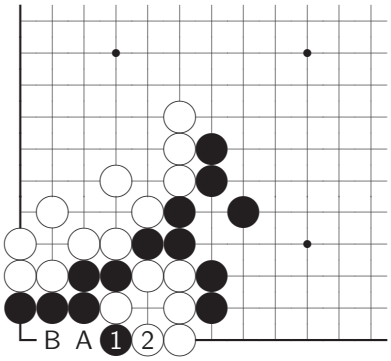

1
a
b
3
2
4

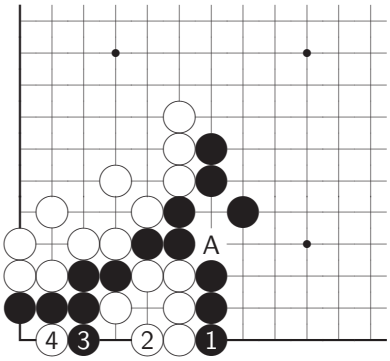

4
5
2
1
3

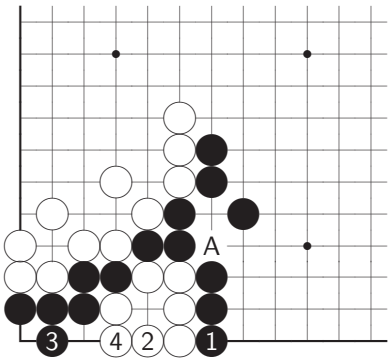

4
3
2
1
5

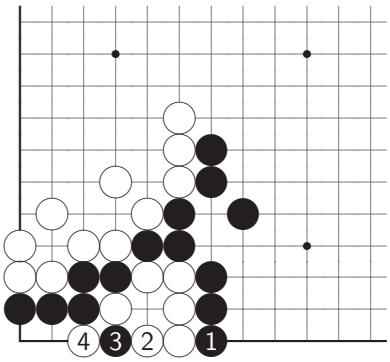

4
2 5 1 3

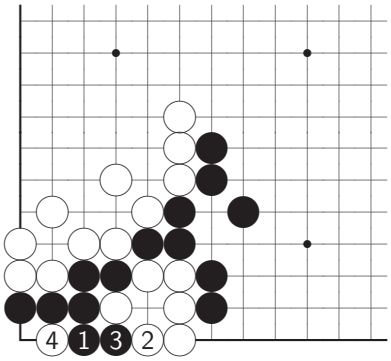

5
2 4 1 3

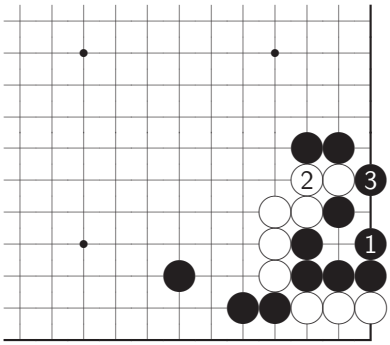

B A 1 2

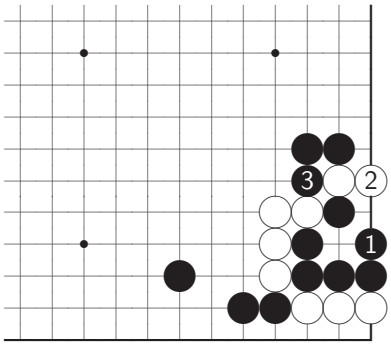

A
4 3 2 1

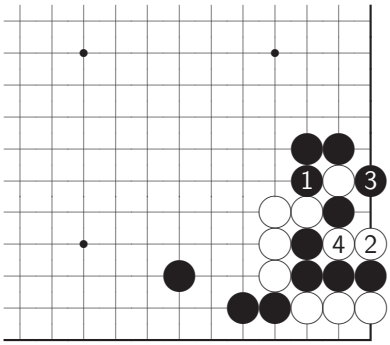

A
3 4 2 1

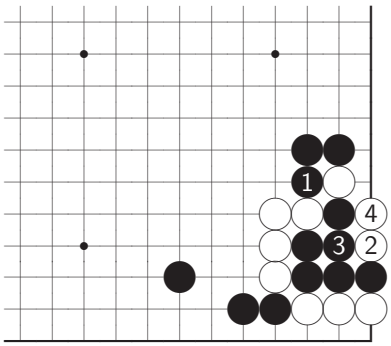

4 3 2 1

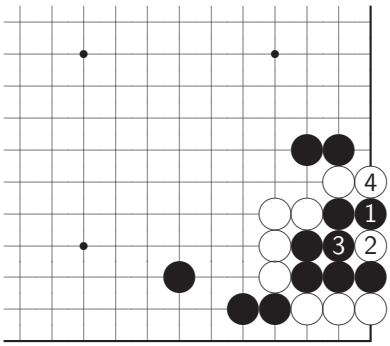

4 1 3 2

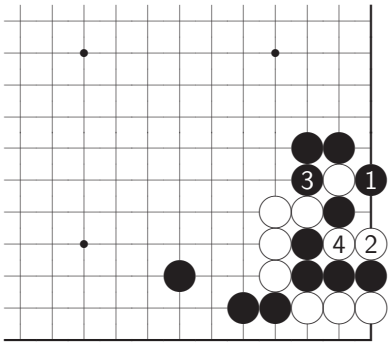

2 3
1

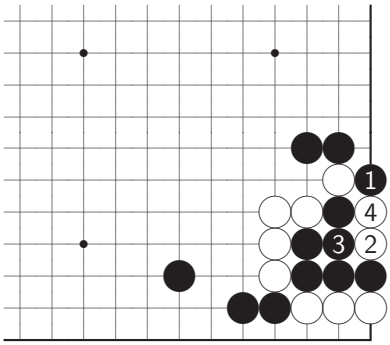

3 2
1

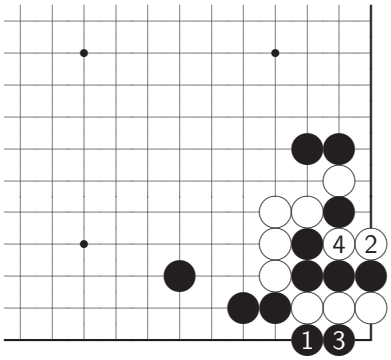

1 3
4 2

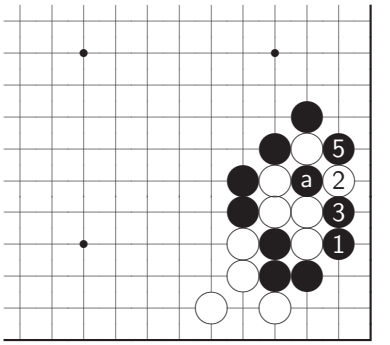

1
4
3 2

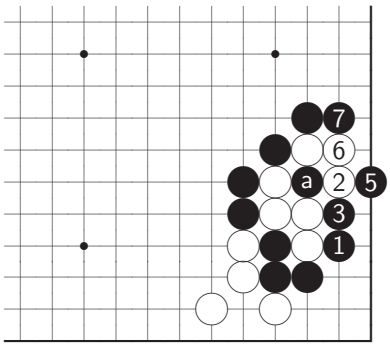

4
1
3 2

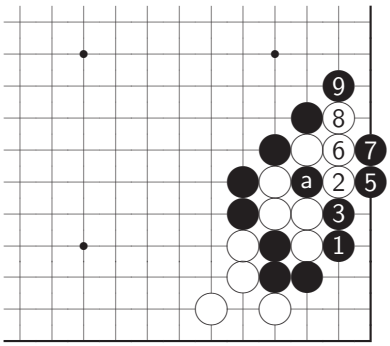

3
1
4
2

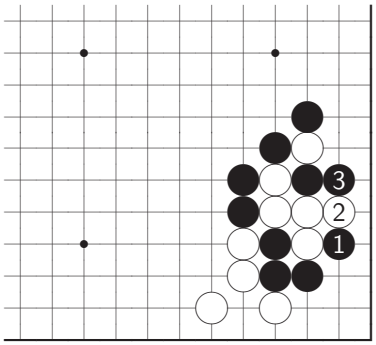

1
4
3
2

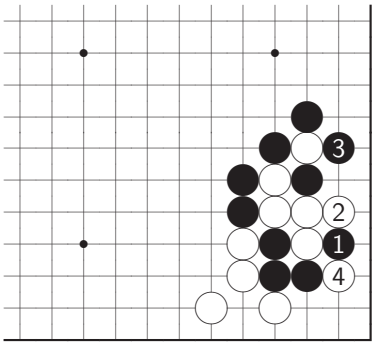

4
2
1
3

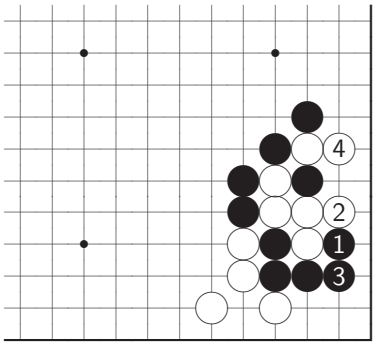

5
a
2
3
1

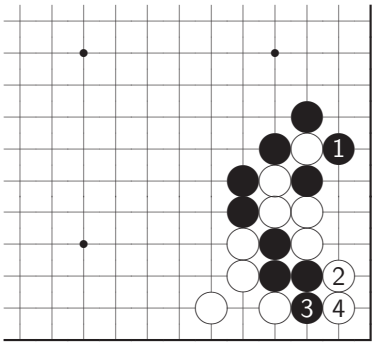

7
6
a
2
5
3
1

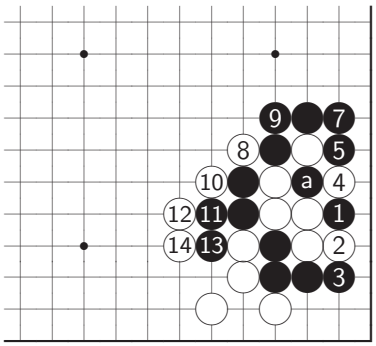

9
8
6
7
a
2
5
3
1

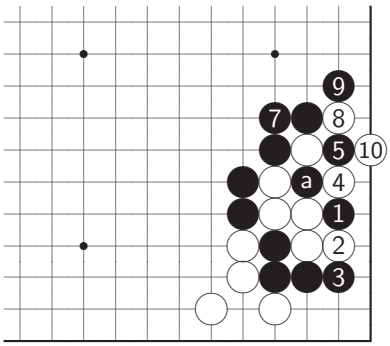

3
2
1

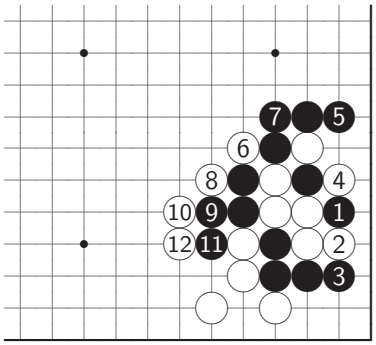

3
2
1
4

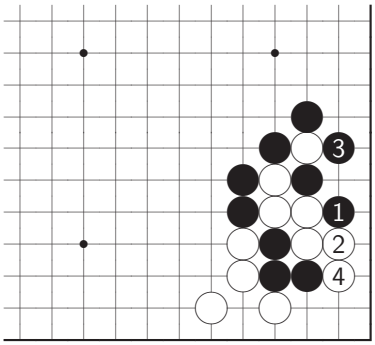

4
2
1
3

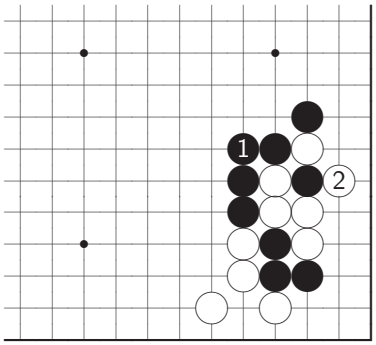

1
2
3
4

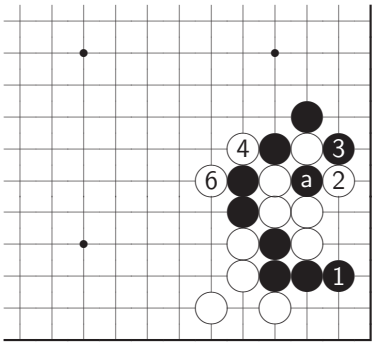

9
7
8
5
10
a
4
12
11
1
14
13
2
3

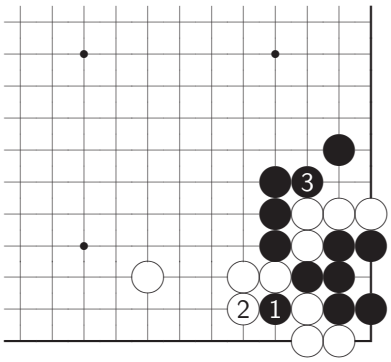

9
7
8
5
10
a
4
1
2
3

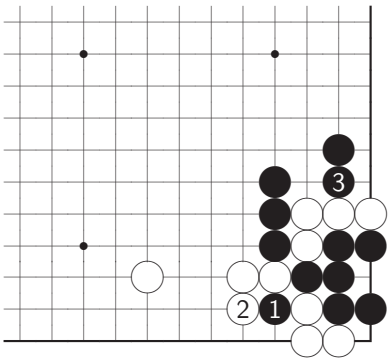

7 5
6
8 4
10 9 1
12 11 2
3

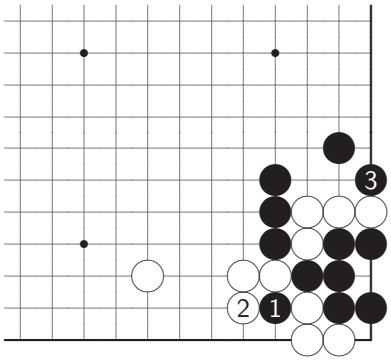

3
1
2
4

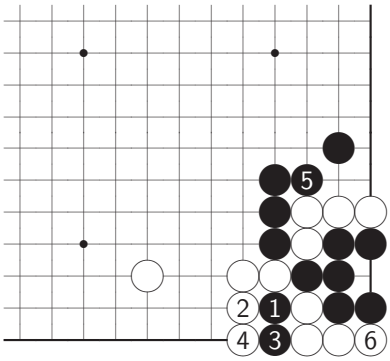

1
2

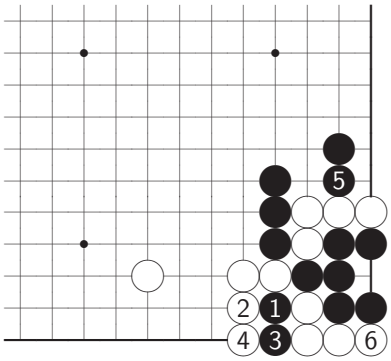

4 3
6 a 2
1

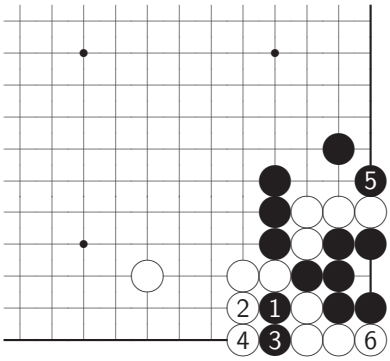

3
2 1

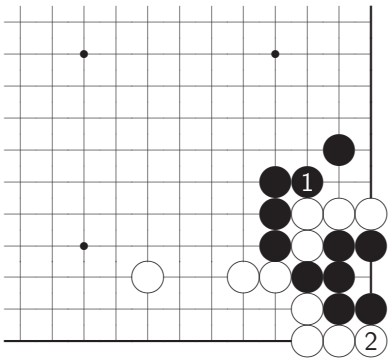

3
2 1

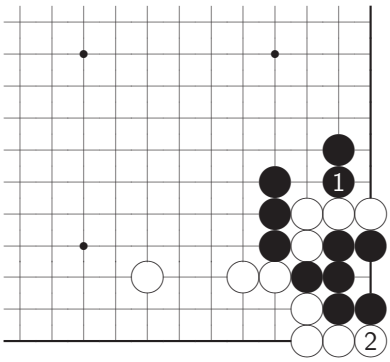

3
2 1

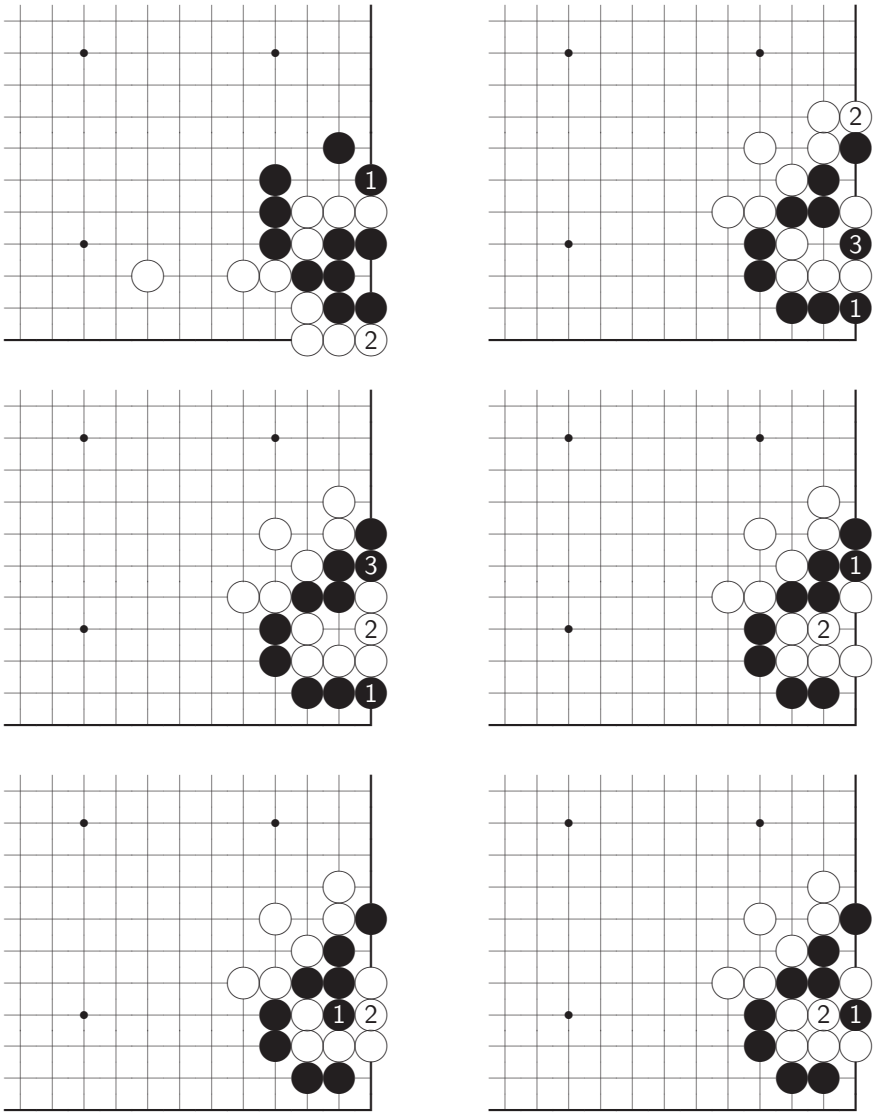

5
2 1
4 3 6

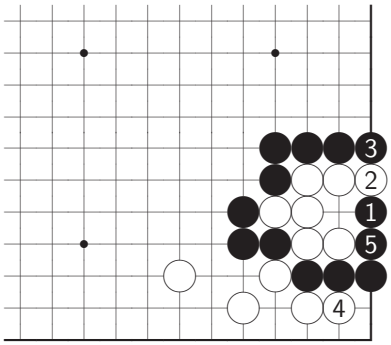

5
2 1
4 3 6

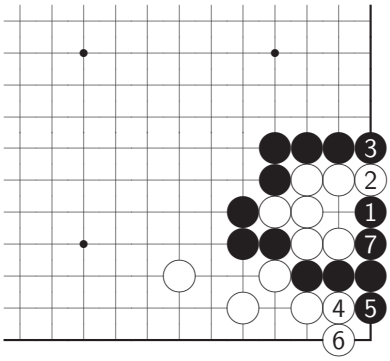

5
2 1
4 3 6

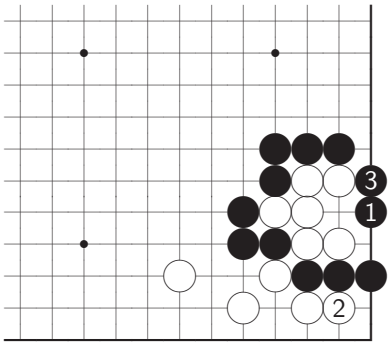

1
2

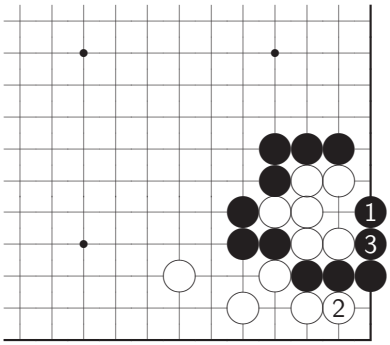

1
2

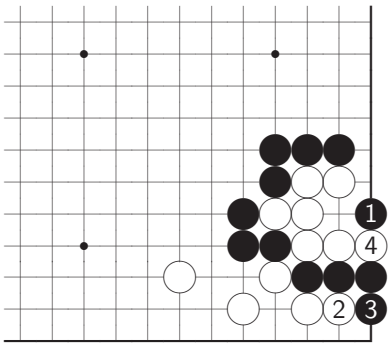

1
2
2
3
1
3
2
1
1
2
2
1
1 2
2 1

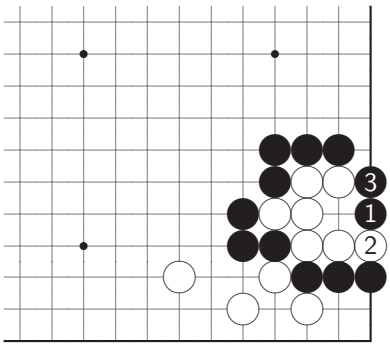

3
2
1
5
4

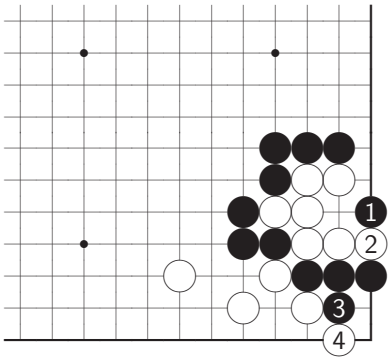

3
2
1
7
4
5
6

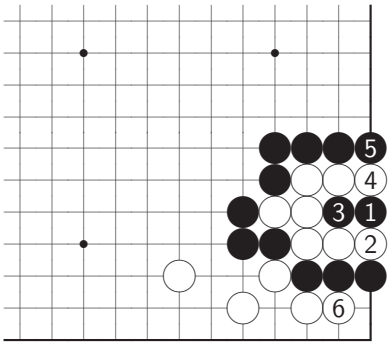

3
1
2

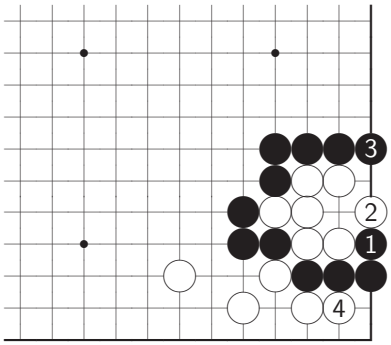

1
3
2

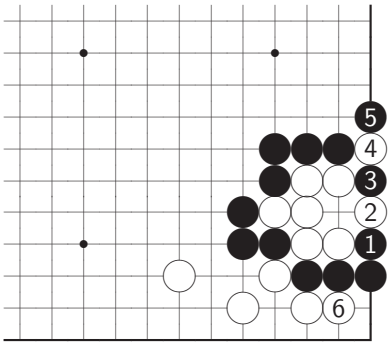

1
4
2
3

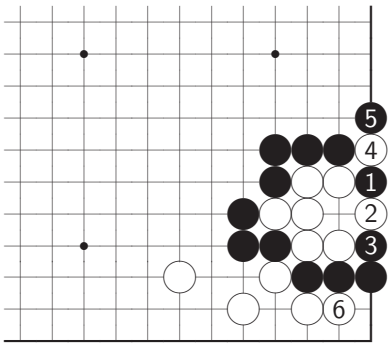

3
1
2

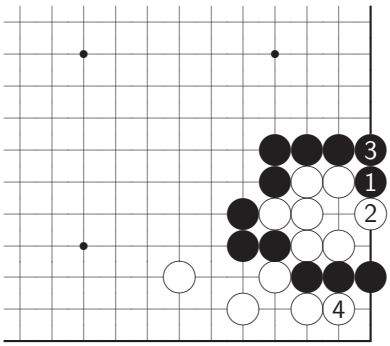

1
2
3
4

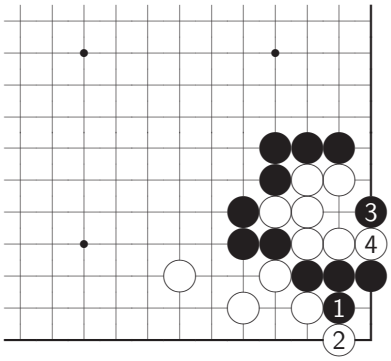

5
4
3
1
2
6

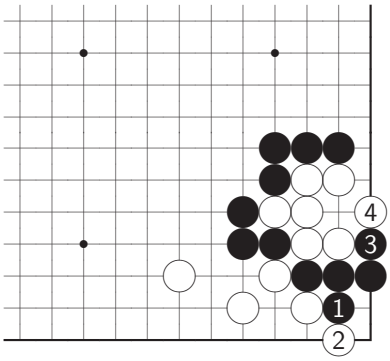

3
2
1
4

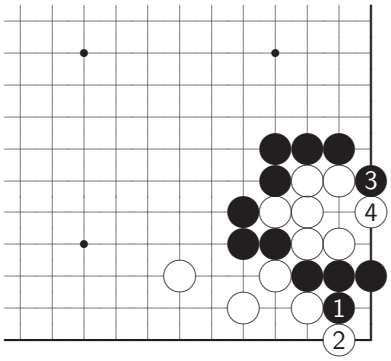

5
4
3
2
1
6

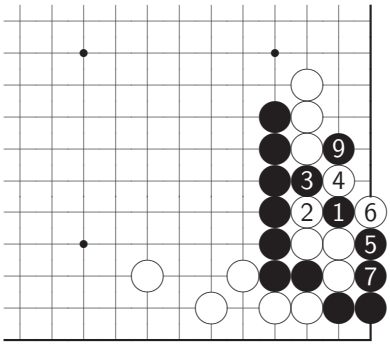

5
4
1
2
3
6

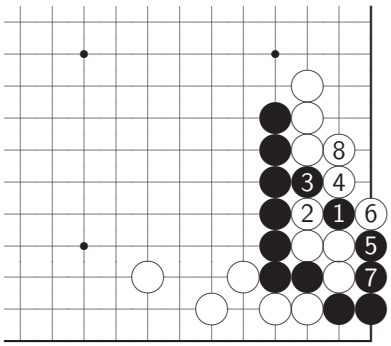

3
1
2
4

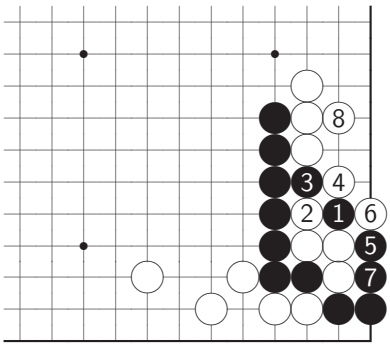

3
4
1
2

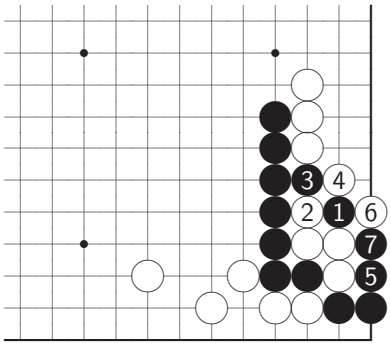

4
3
1
2

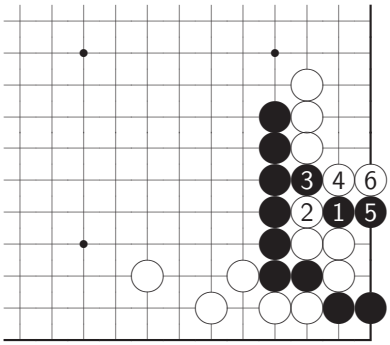

3
4
1
2

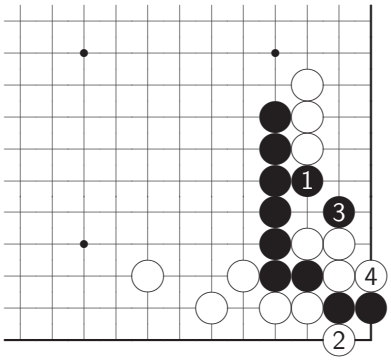

9
3
4
2
1
6
5
7

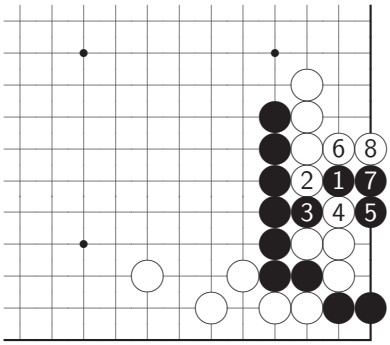

8
3
4
2
1
6
5
7

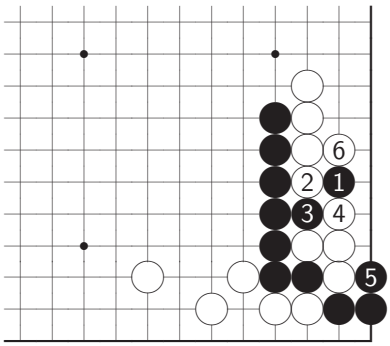

8
3
4
2
1
6
5
7

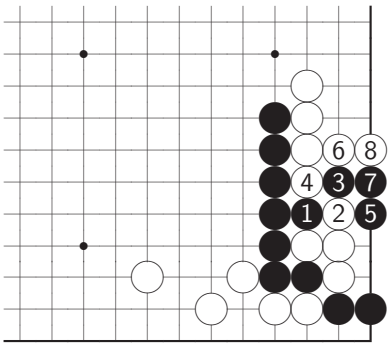

3 4
2 1 6
7
5

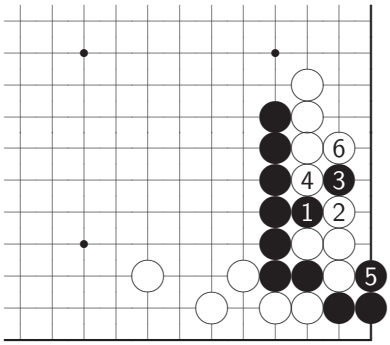

3 4 6
2 1 5

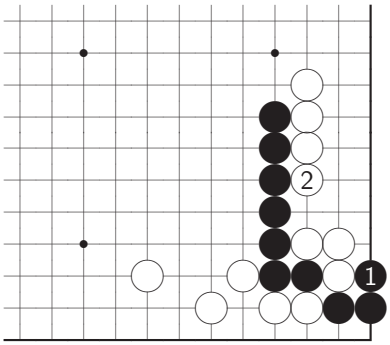

1
3
4
2

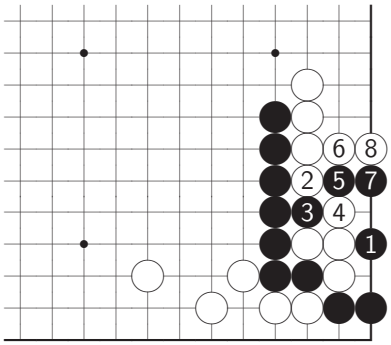

6 8
2 1 7
3 4 5

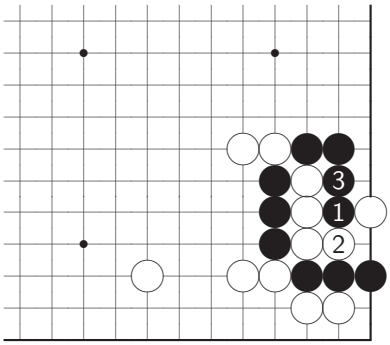

6
2 1
3 4
5

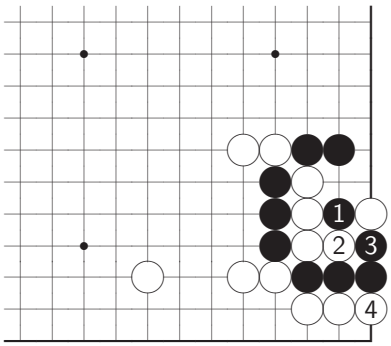

6 8
4 3 7
1 2 5

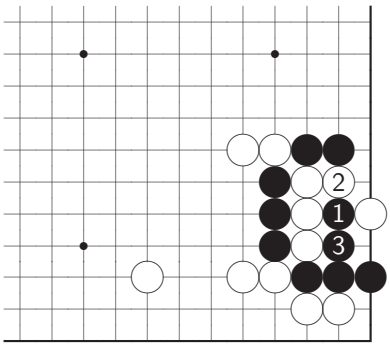

6
4 3
1 2
5

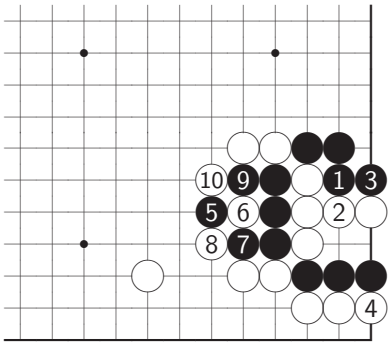

2
1

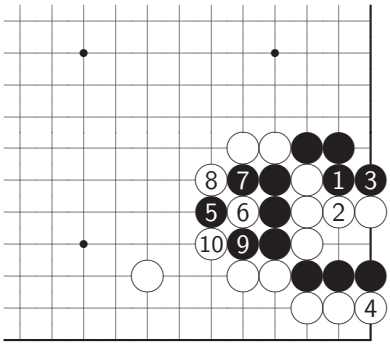

6 8
2 5 7
3 4
1

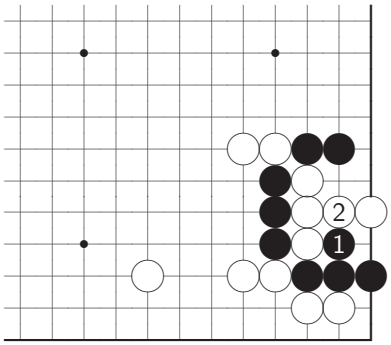

3
1
2

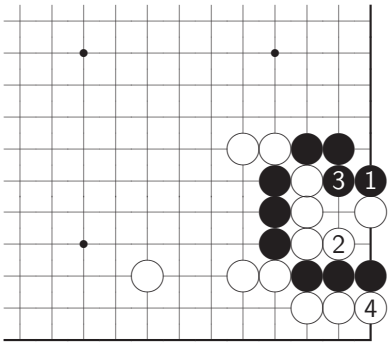

1
2 3
4

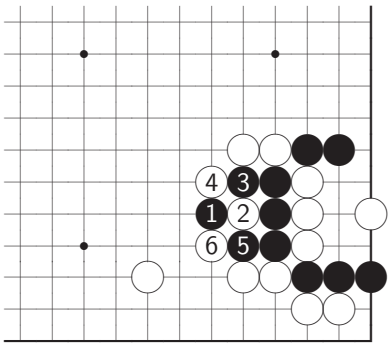

2
1
3

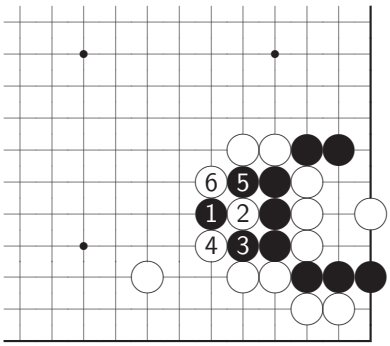

10 9 1 3
5 6 2
8 7
4

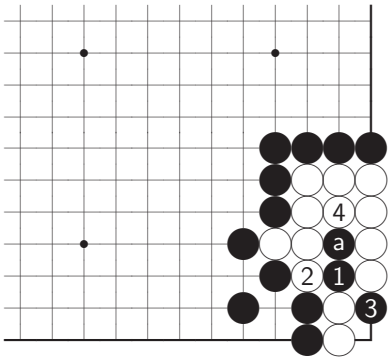

8 7 1 3
5 6 2
10 9
4

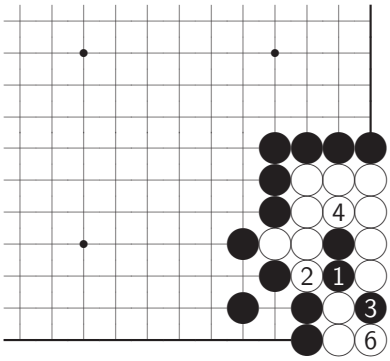

2
1

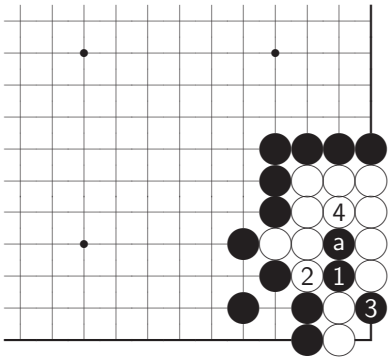

3 1
2
4

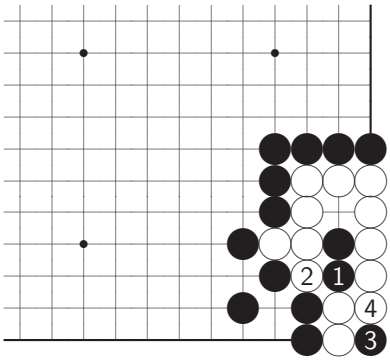

4 3
1 2
6 5

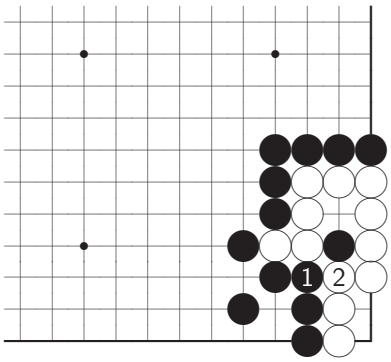

6 5
1 2
4 3

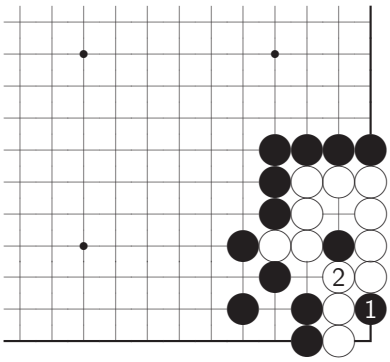

4
a
2
1
3

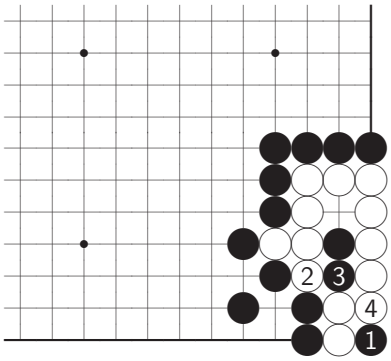

4
2
1
3
6

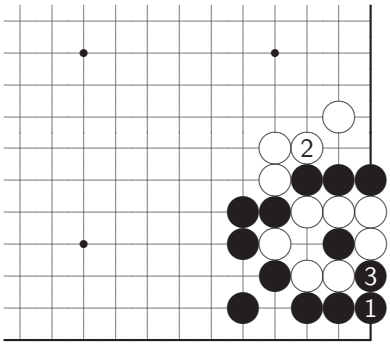

4
a
2
1
3

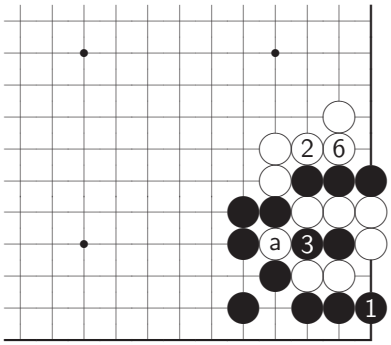

2
1
4
3

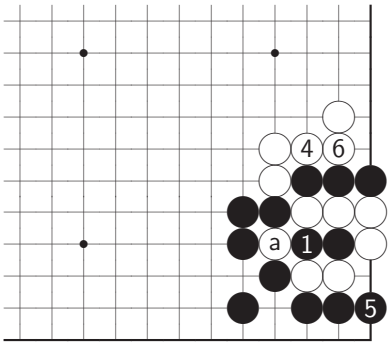

1
2

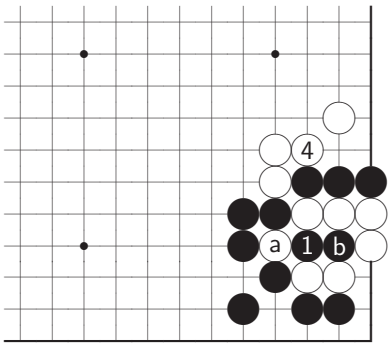

2
1

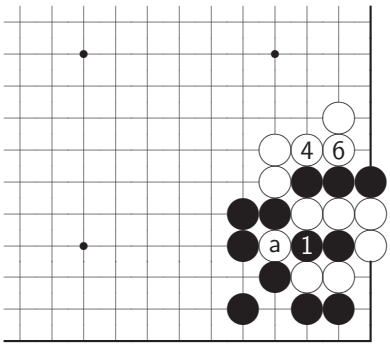

2
3
4
1

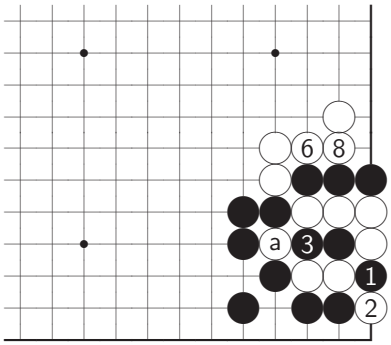

2
3
1

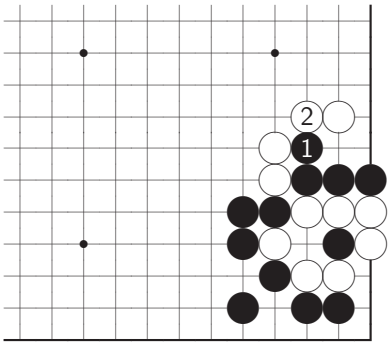

2
6
a
3
1

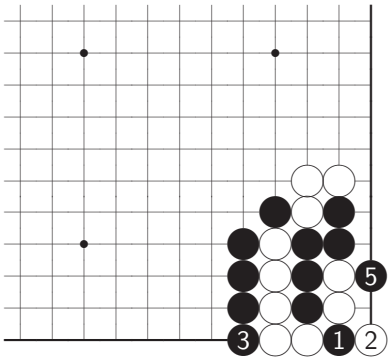

4
6
a
1
5

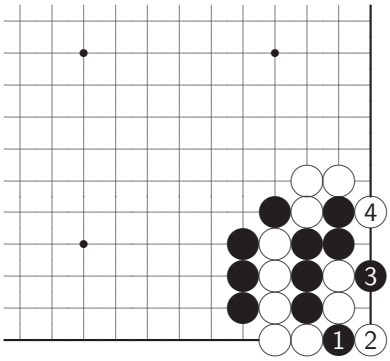

4
a
1
b

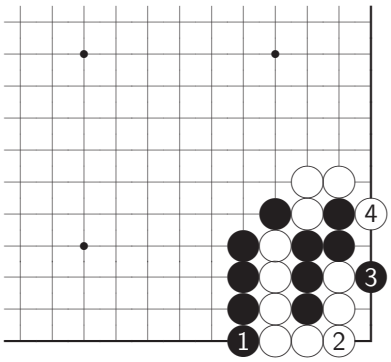

4
6
a
1

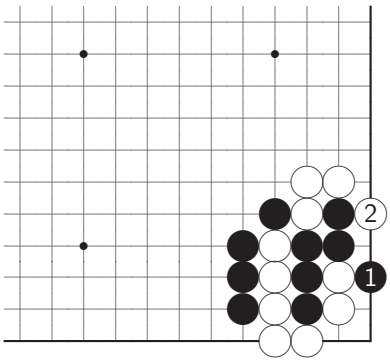

6
8
a
3
1
2

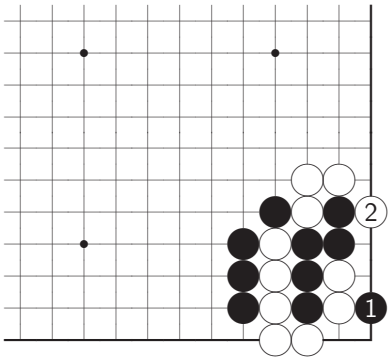

2
1

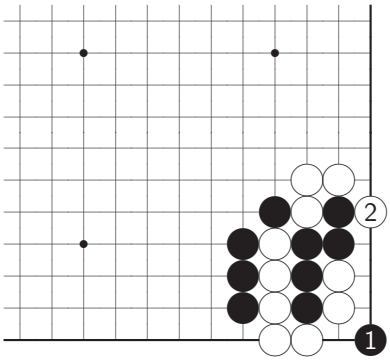

5
3
1
2

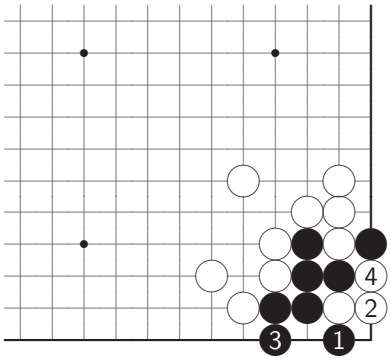

4
3
1
2

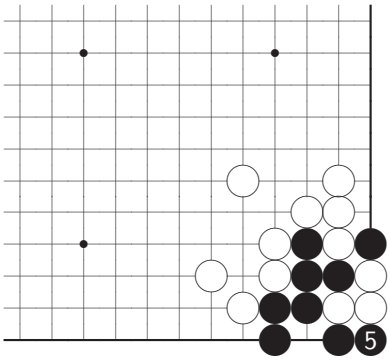

4
3
1
2

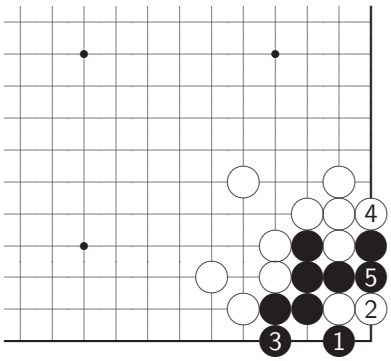

2
1

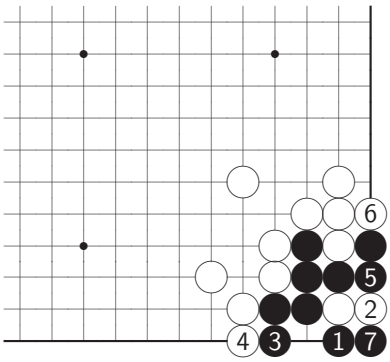

2
1

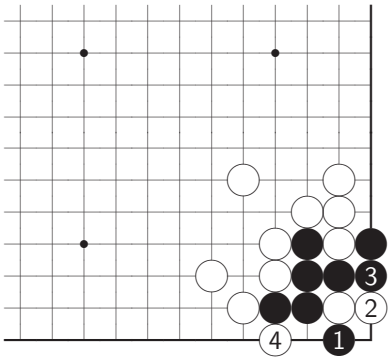

2
1

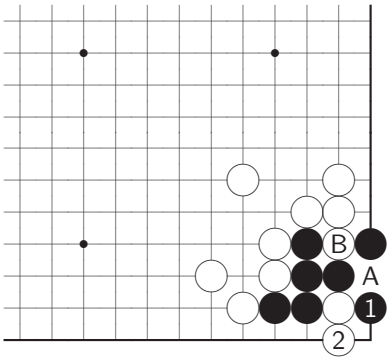

4
2
3
1

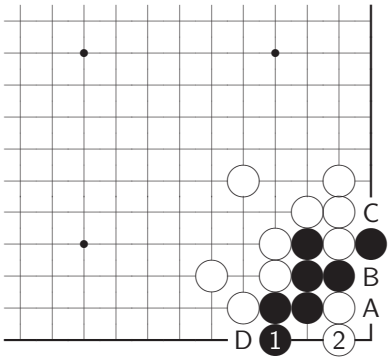

5

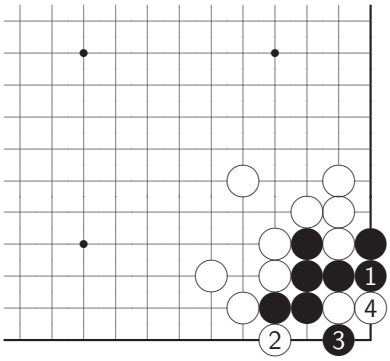

4
5
2
3
1

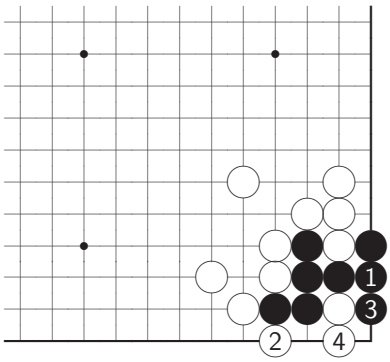

6
5
2
4
3
1
7

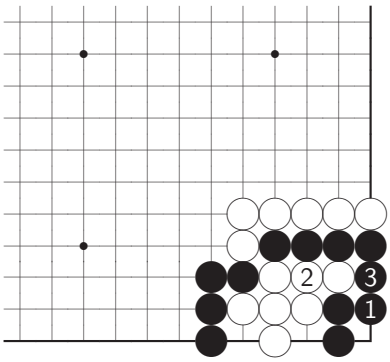

3
2
4
1

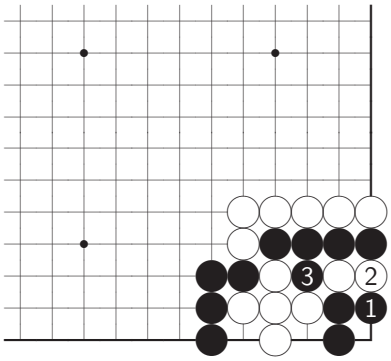

B
A
1
2

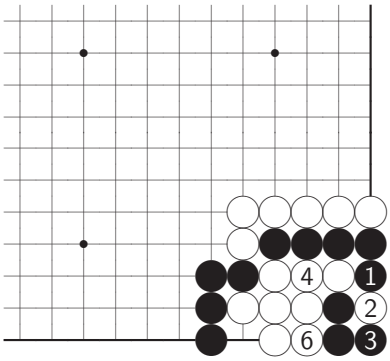

C
B
A
D
1
2

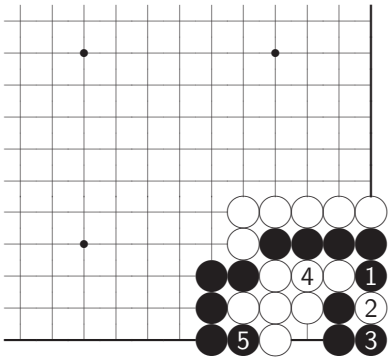

1
4
2
3

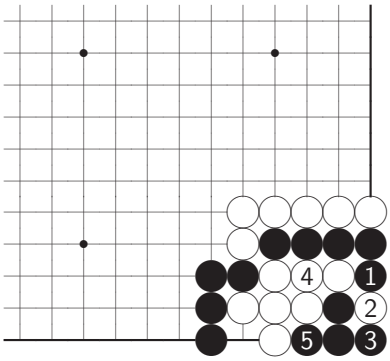

1
3
2
4

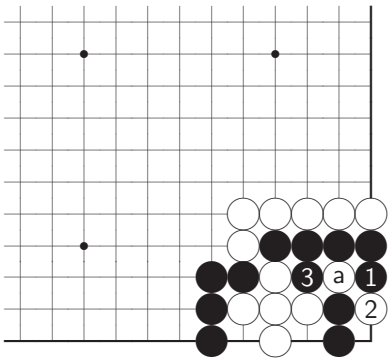

2
3
1

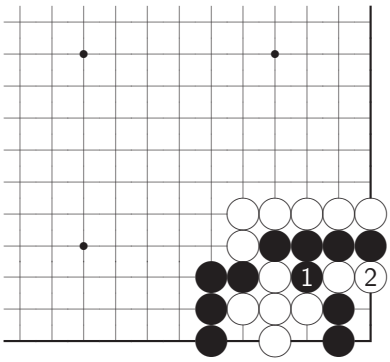

3
2
1

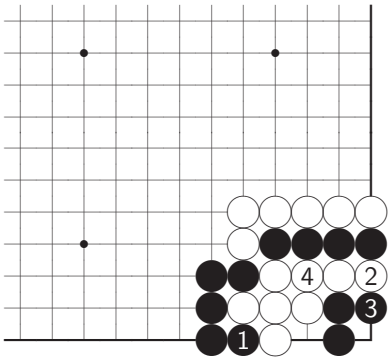

4
1
2
6
3

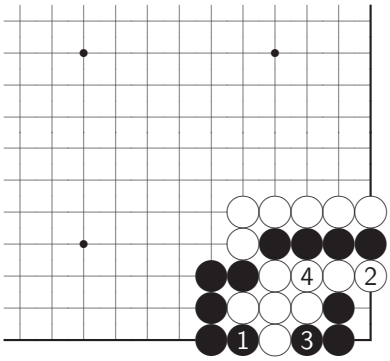

4
1
2
5
3

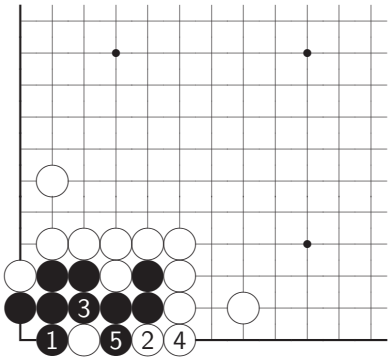

4
1
2
5
3

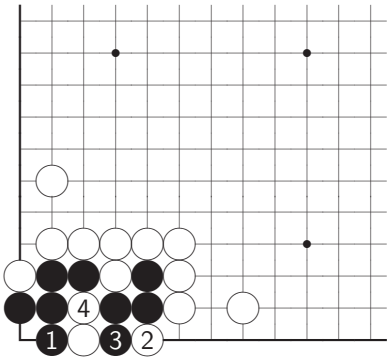

3
a
1
2

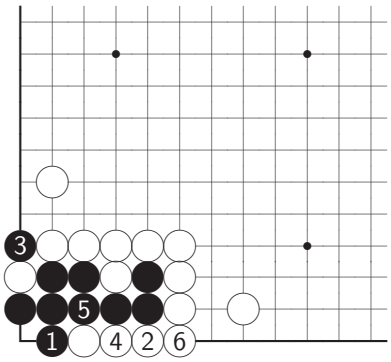

1
2

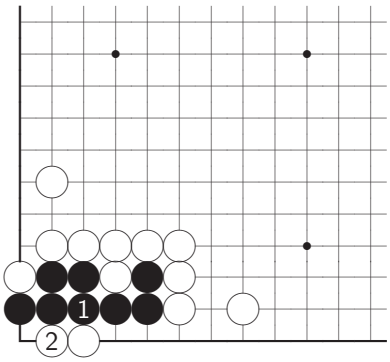

4
2
3
1

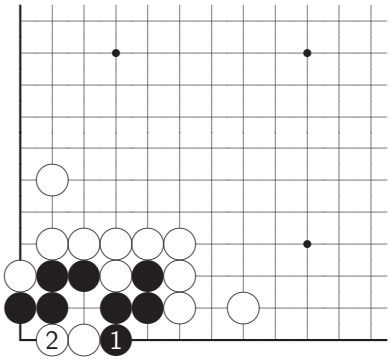

4
2
1
3

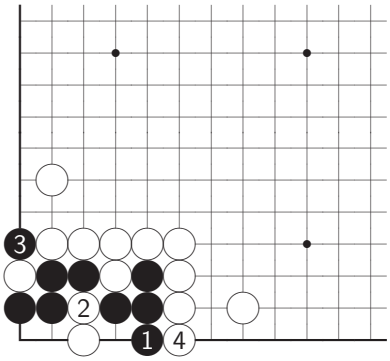

3
1
5
2
4

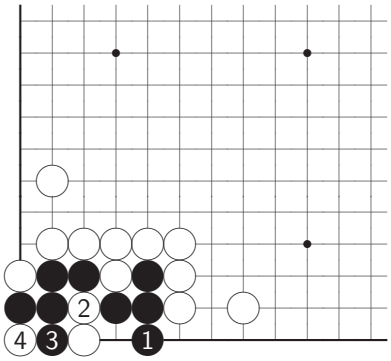

4
1
3
2

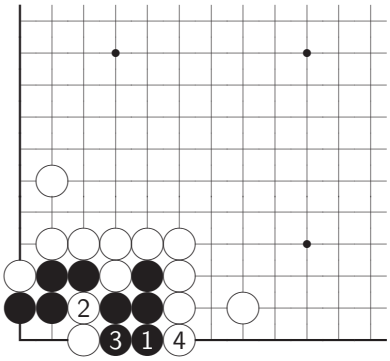

3
5
1
4
2
6

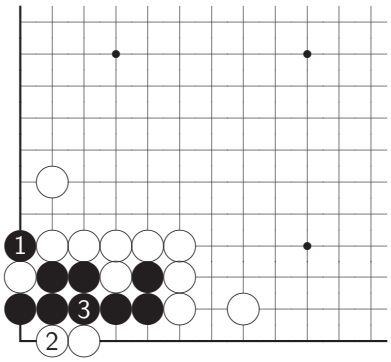

1
2

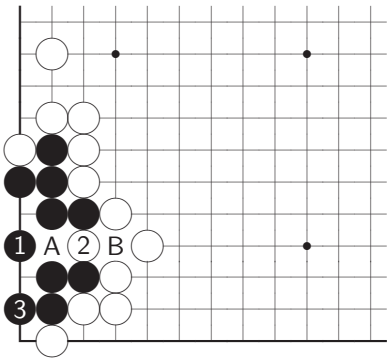

2
1

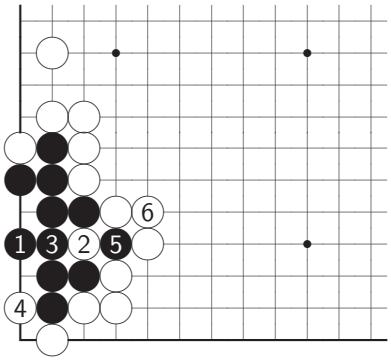

3
2
1
4

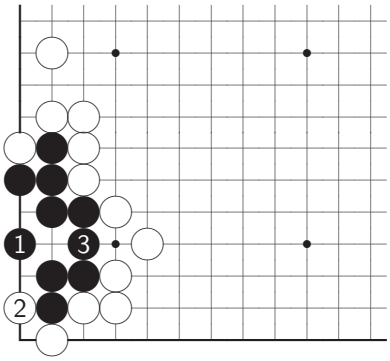

2
4
3
1

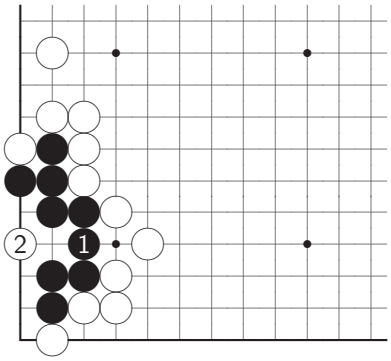

2
3
1
4

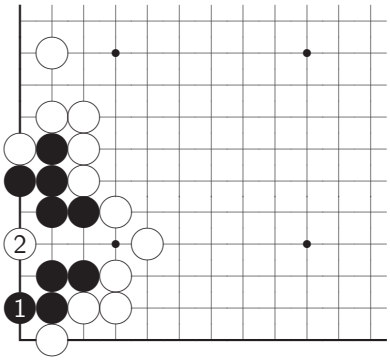

1
3
2

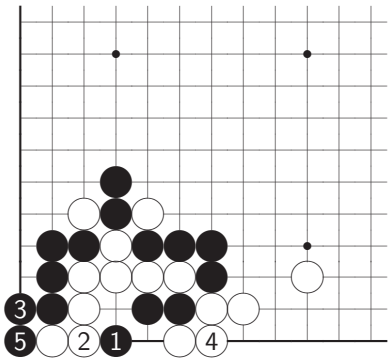

1
A
2
B
3

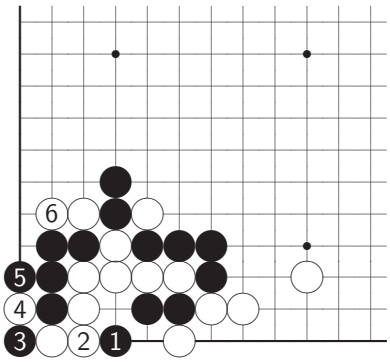

6
1 3 2 5
4

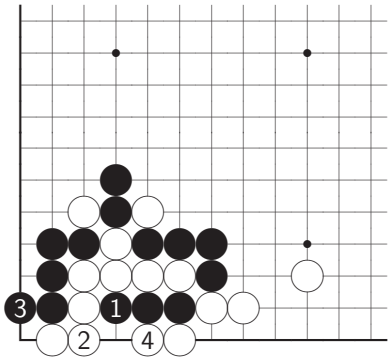

1 3
2

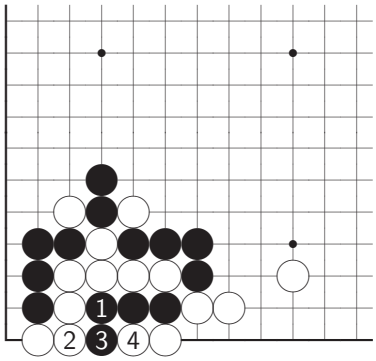

2 1

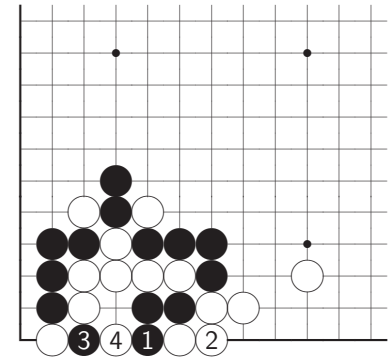

2
1

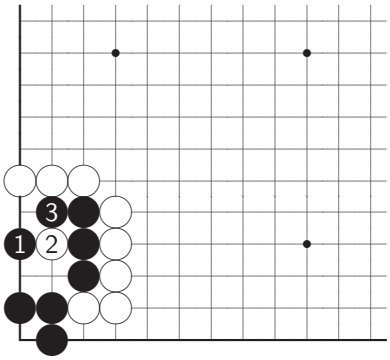

3
5 2 1 4

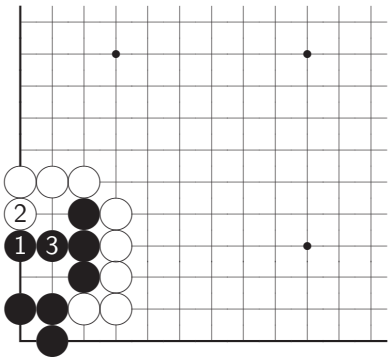

6
5
4
3 2 1

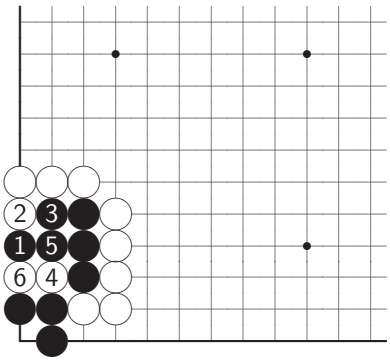

3
1
2
4

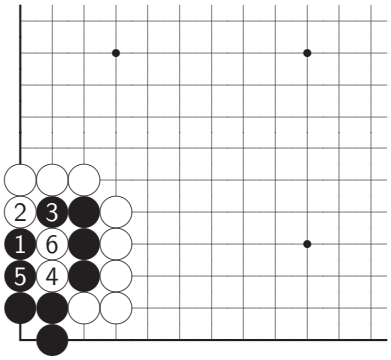

1
2
3
4

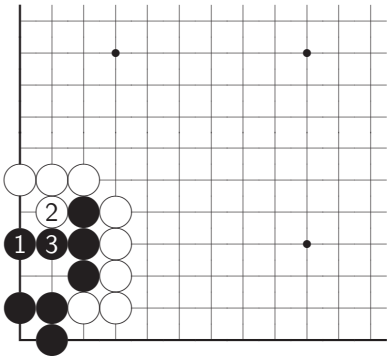

3
4
1
2

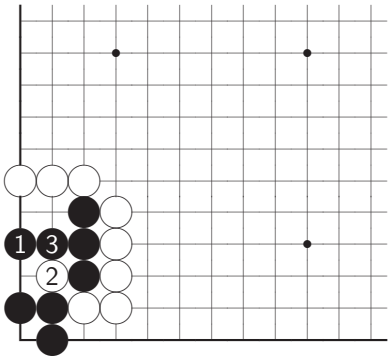

3
1
2

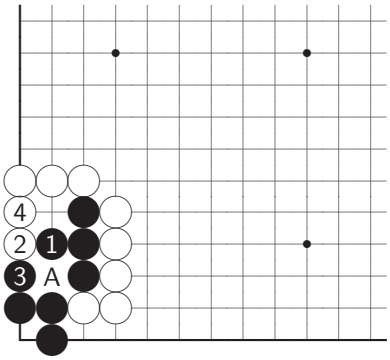

2
1
3

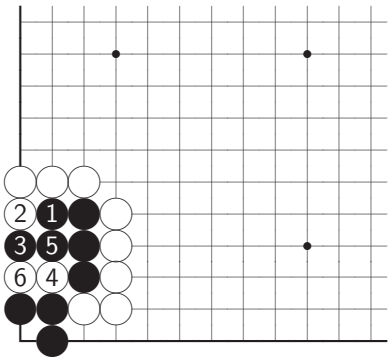

2
3
1
5
6
4

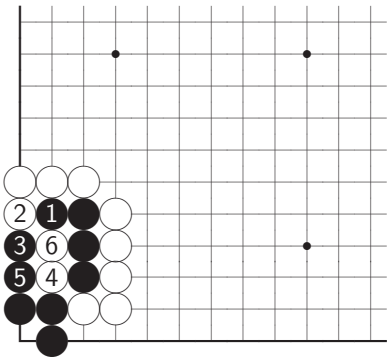

2 3
1 6
5 4

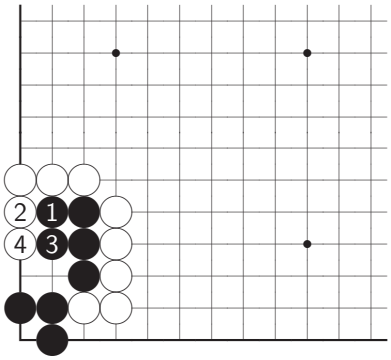

2
1 3

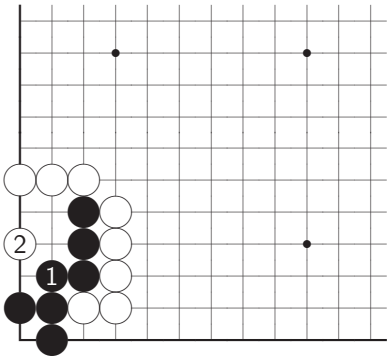

1 3
2

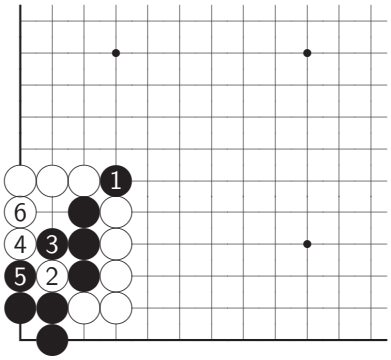

4
2 1
3 A

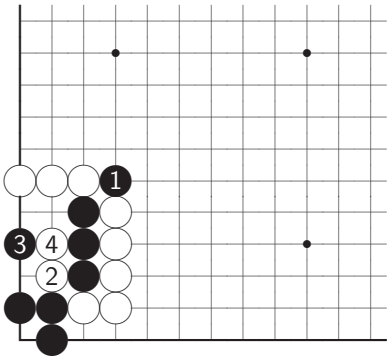

2 1
3 5
6 4

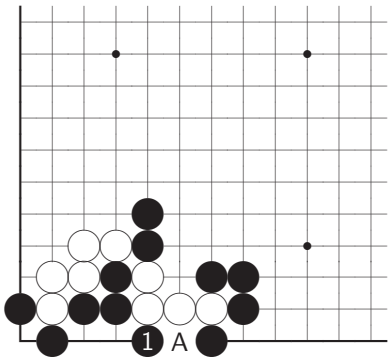

2 1
3 6
5 4

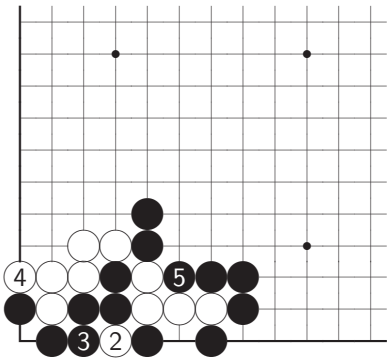

2
1
4
3

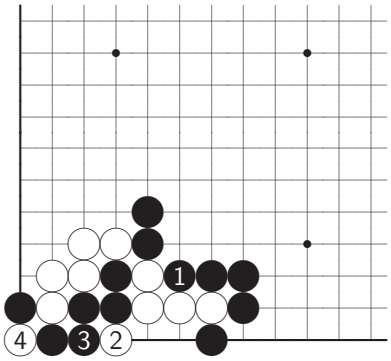

2
1

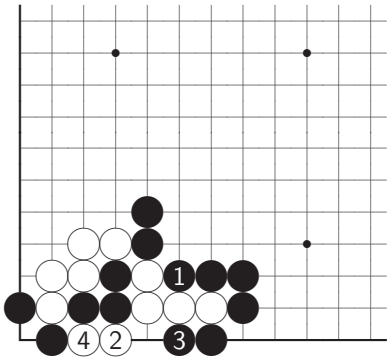

1
6
4
3
5
2

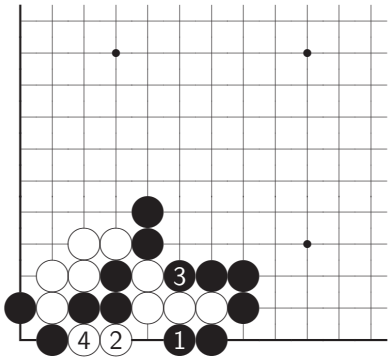

1
3
4
2

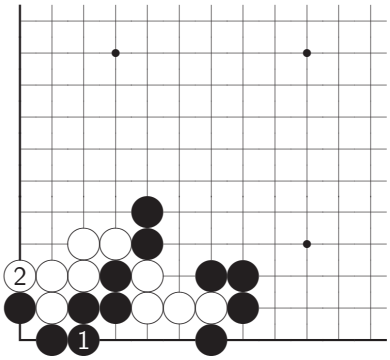

1
A

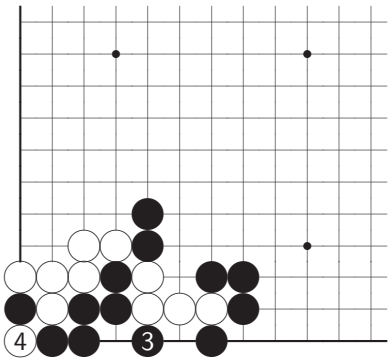

4
5
3
2

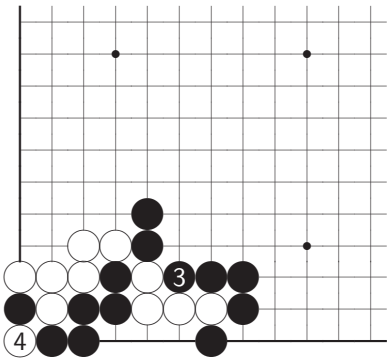

1
4
3
2

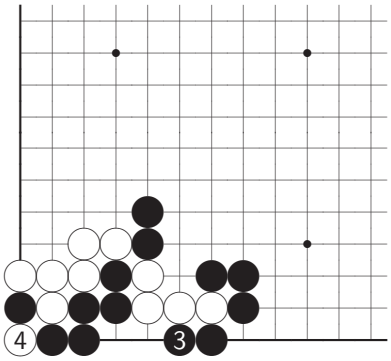

1
4
2
3

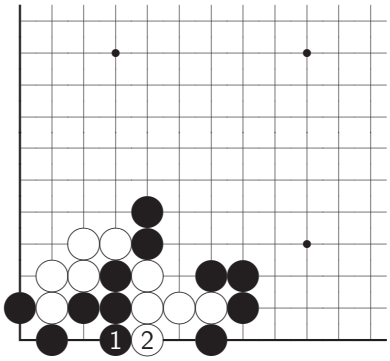

3
4
2
1

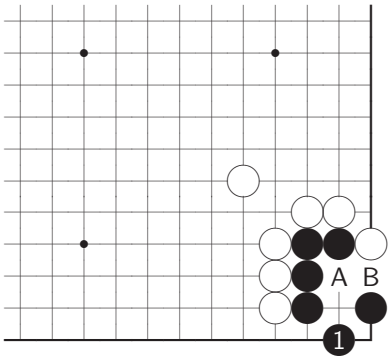

2
1

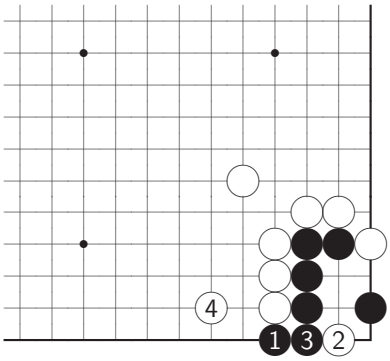

4
3

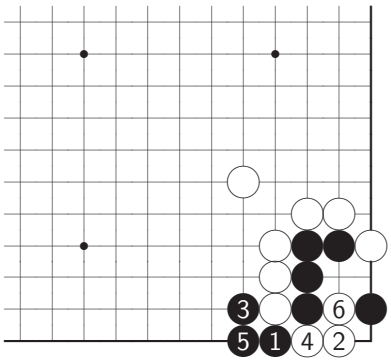

3
4

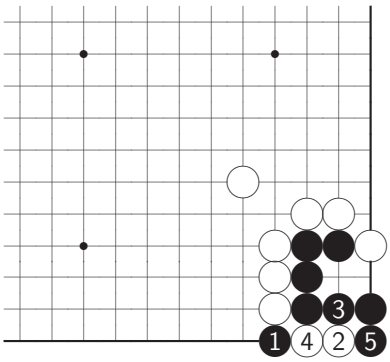

4
3

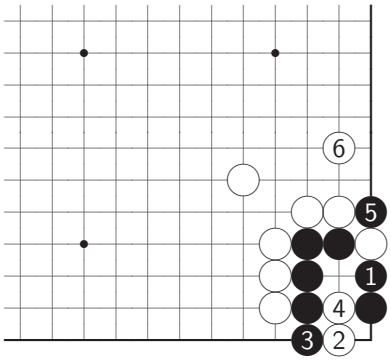

1
2

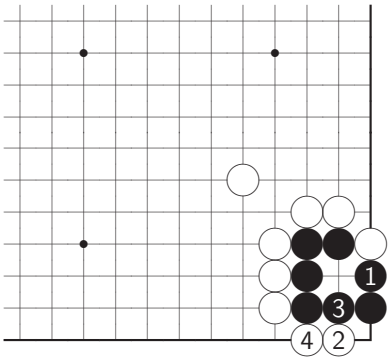

A
B
1

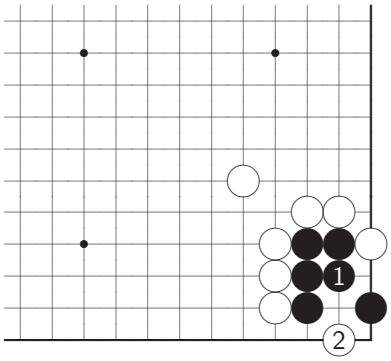

4
1
3
2

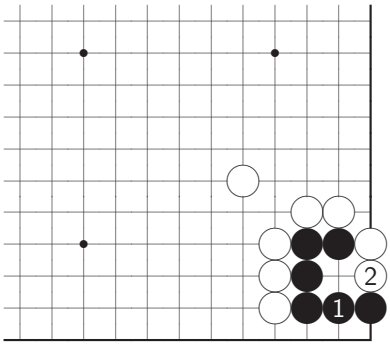

3
6
5
1
4
2

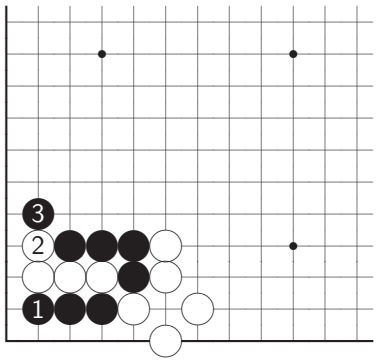

3
1
4
2
5

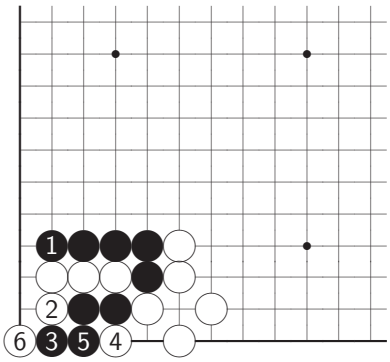

6
5
1
4
3
2

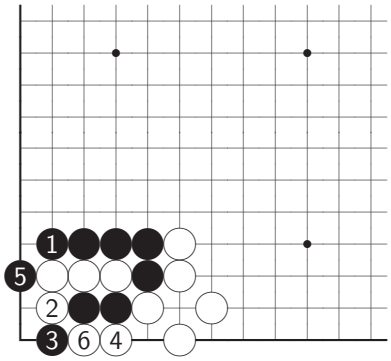

1
3
4
2

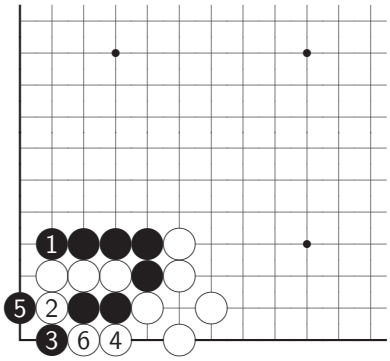

1
2

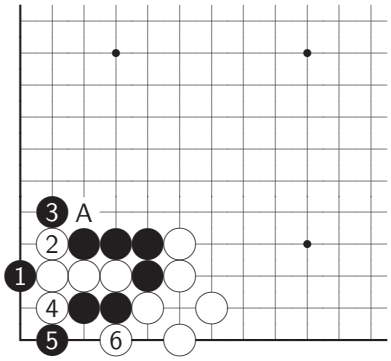

2
1

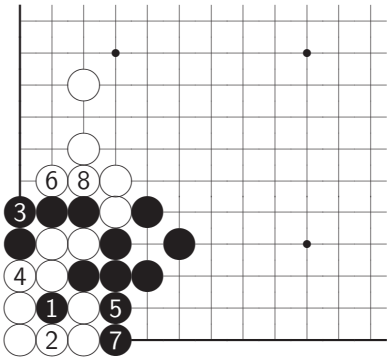

3
2
1

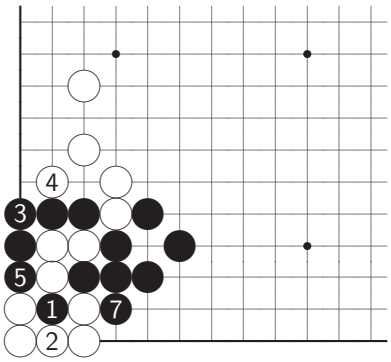

1
2
6
3
5
4

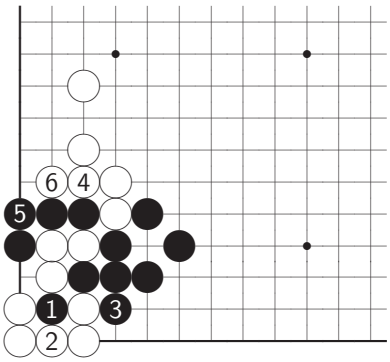

1
5
2
3 6 4

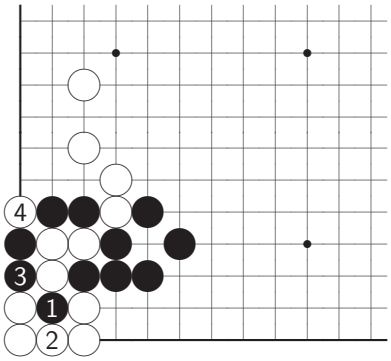

1
5 2
3 6 4

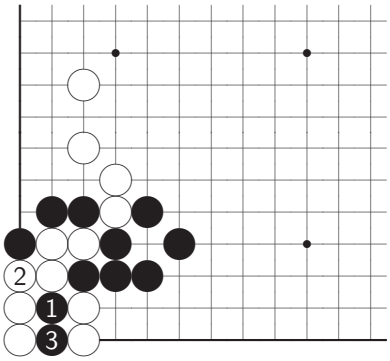

3 A
2
1
4
5 6

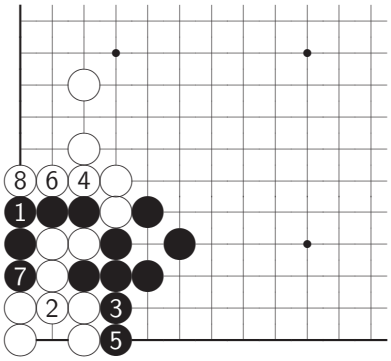

6 8
3
4
1 5
2 7

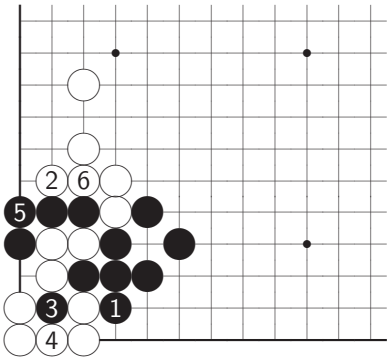

4
3
5
1 7
2

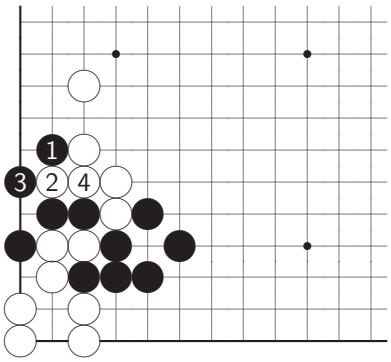

6 4
5
1 3
2

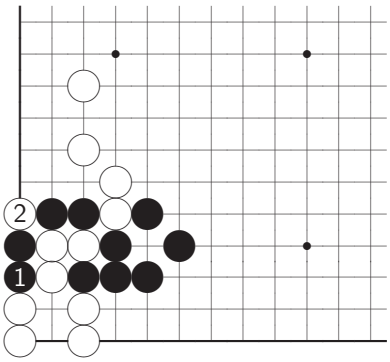

4
3
1
2

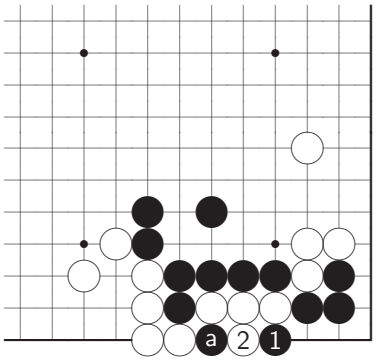

2
1
3

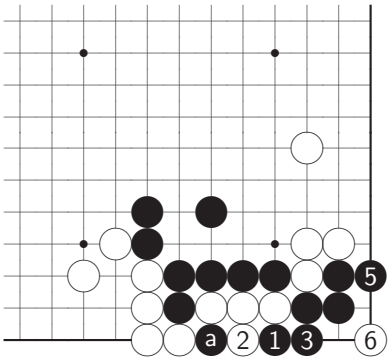

8 6 4
1
7
2
3
5

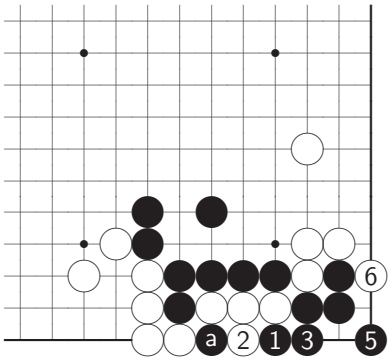

2 6
5
3
1
4

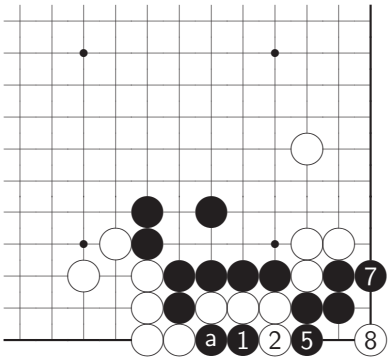

1
3 2 4

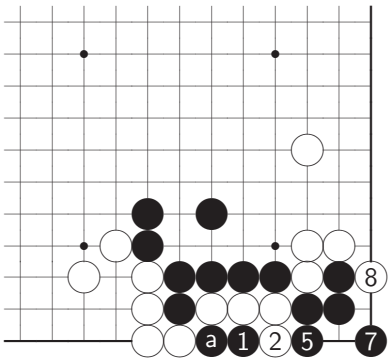

2
1

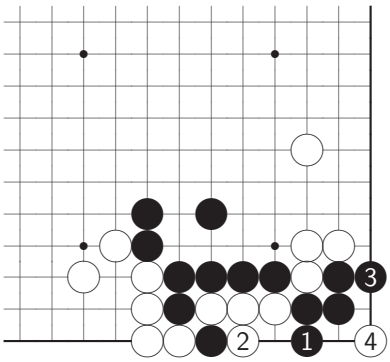

a 2 1

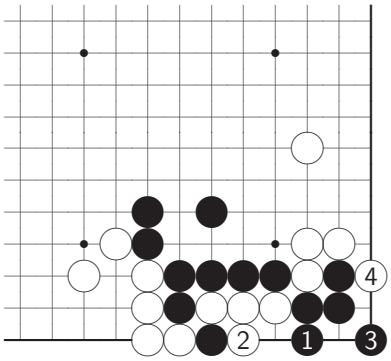

5
a 2 1 3 6

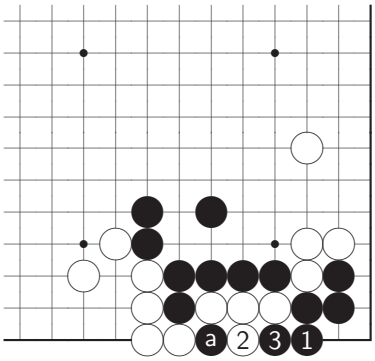

6
a 2 1 3 5

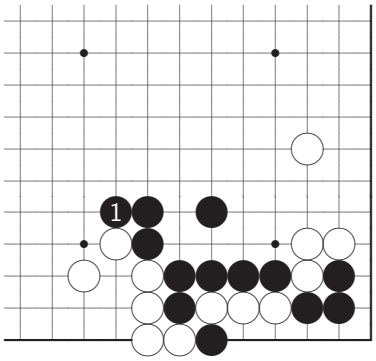

7
a 1 2 5 8

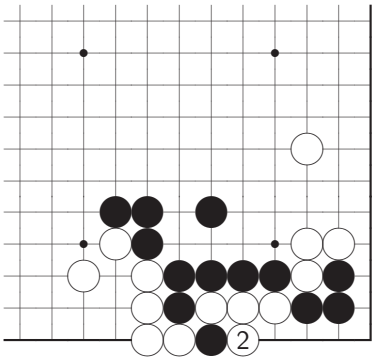

8
a 1 2 5 7

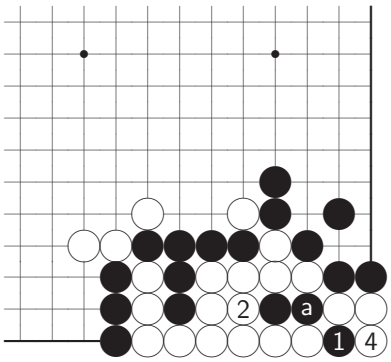

3
2 1 4

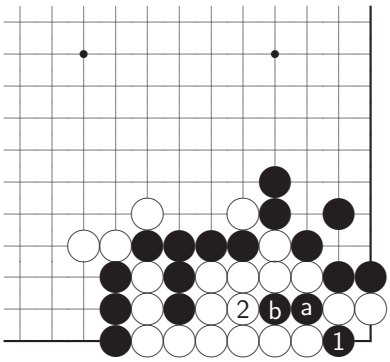

4
2
1
3

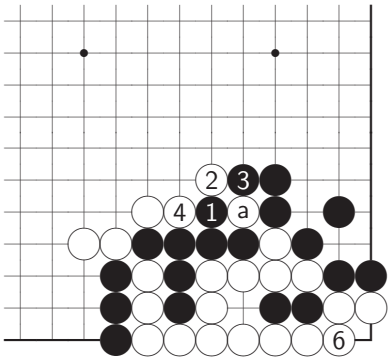

a
2
3
1

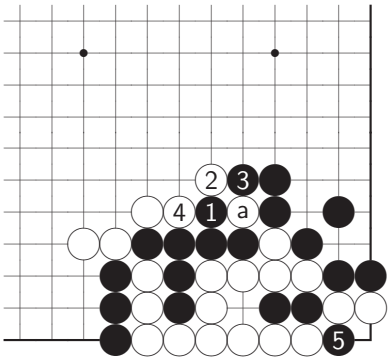

1

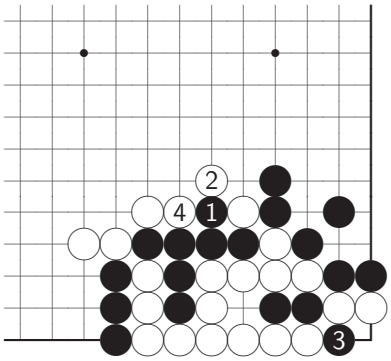

2

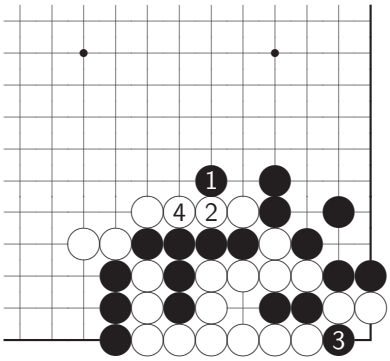

2
a
1
4

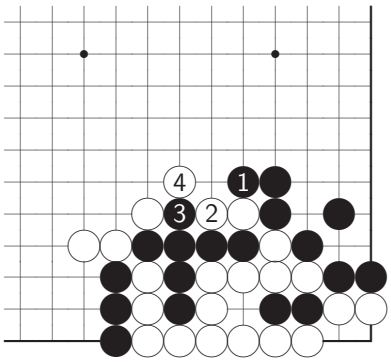

2
b
a
1

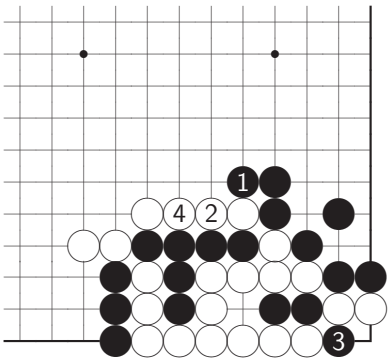

2 3
4 1 a
6

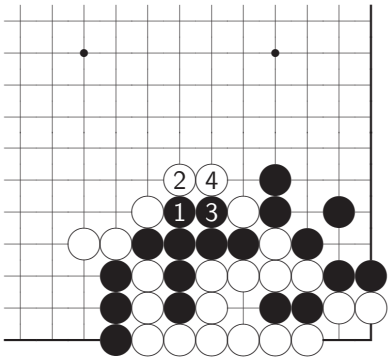

2 3
4 1 a
5

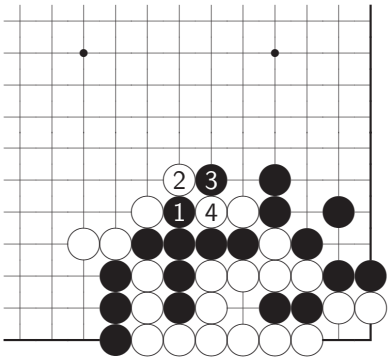

2
4 1
3

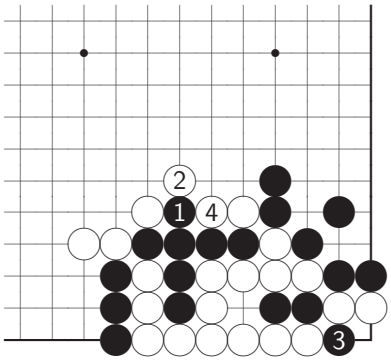

1
4 2
3

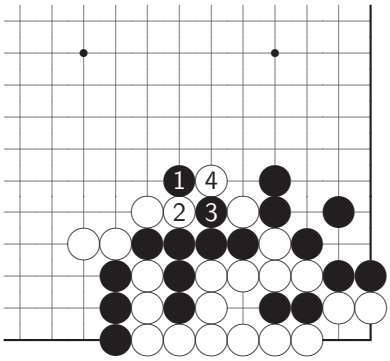

4 1
3 2

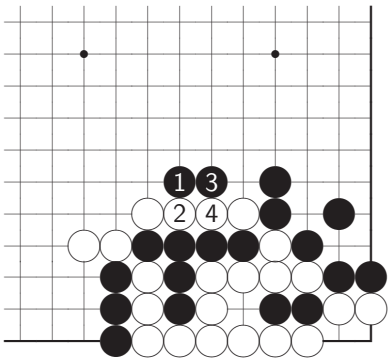

1
4 2
3

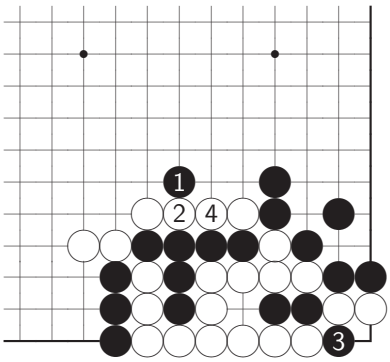

2 4
1 3

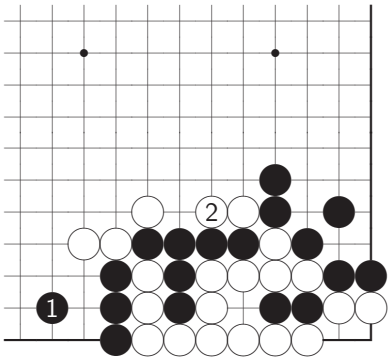

2 3
1 4

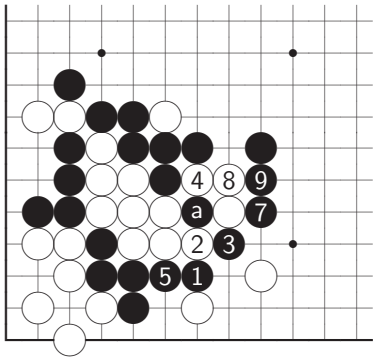

2
1 4
3

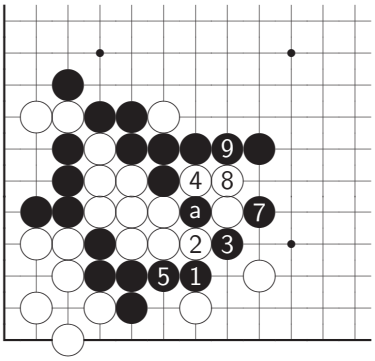

1 4
2 3

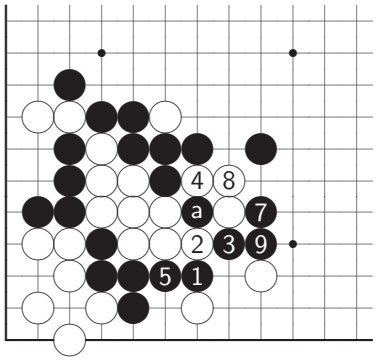

1 3
2 4

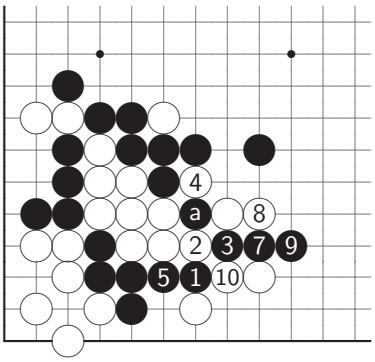

1
2 4
3

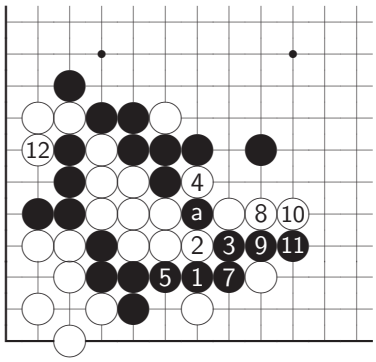

2
1

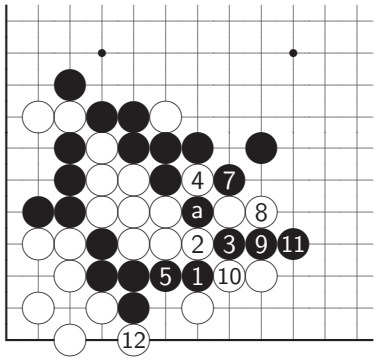

4 8 9
a 7
2 3
5 1

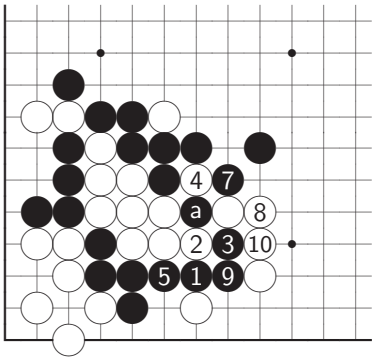

9
4 8
a 7
2 3
5 1

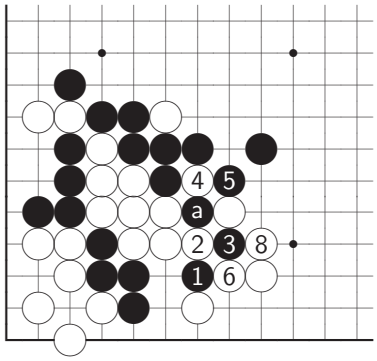

4 8
a 7
2 3 9
5 1

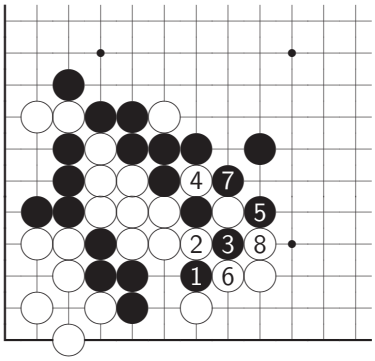

4
a 8
2 3 7 9
5 1 10

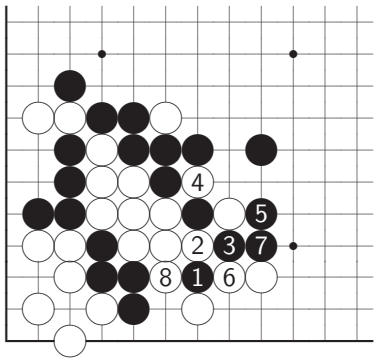

12
4
a 8 10
2 3 9 11
5 1 7

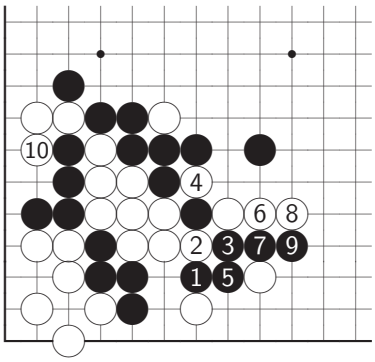

4 7
a 8
2 3 9 11
5 1 10
12

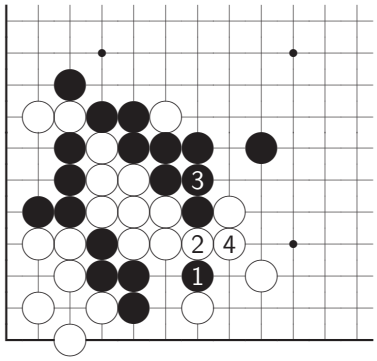

4 7
a 8
2 3 10
5 1 9

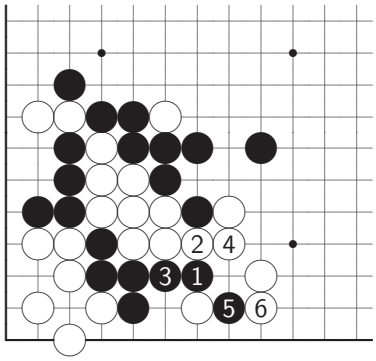

4 5
a
2 3 8
1 6

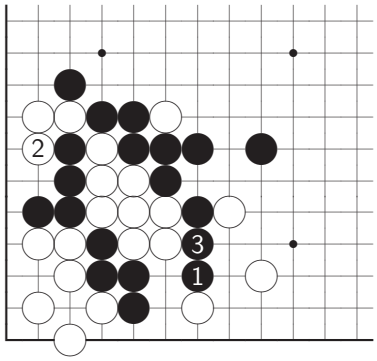

4 7
5
2 3 8
1 6

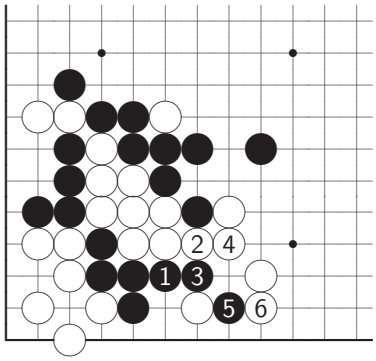

4
5
2 3 7
8 1 6

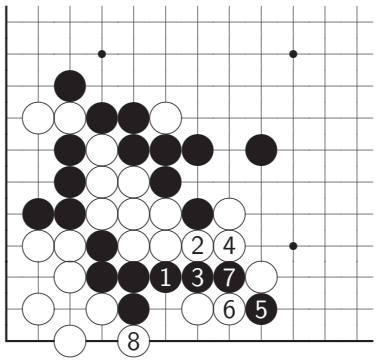

10
4
6 8
2 3 7 9
1 5

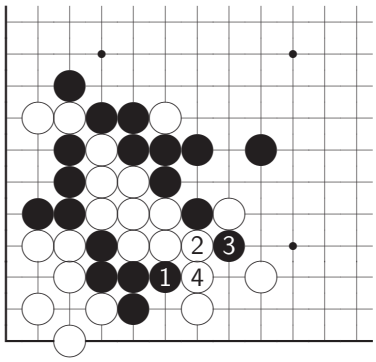

3
2 4
1

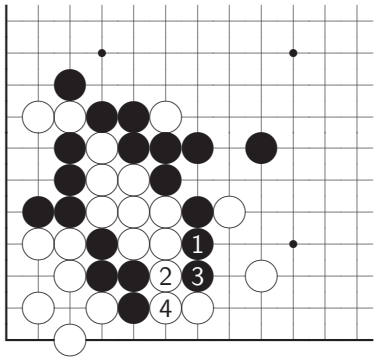

2 4
3 1
5 6

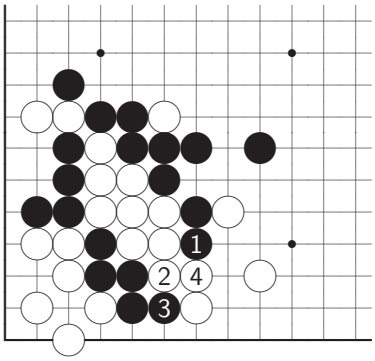

2
3
1

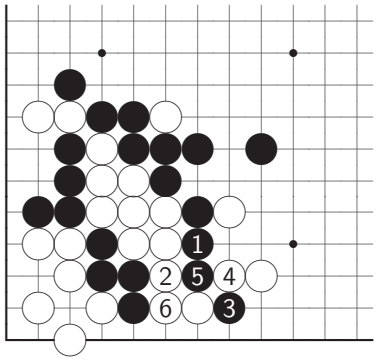

2 4
1 3
5 6

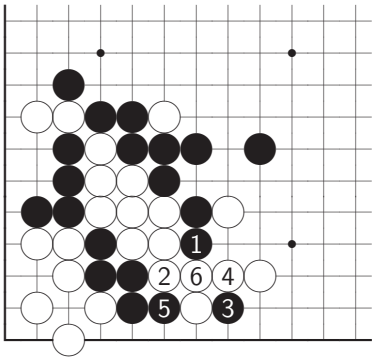

2 4
1 3 7
6 5
8

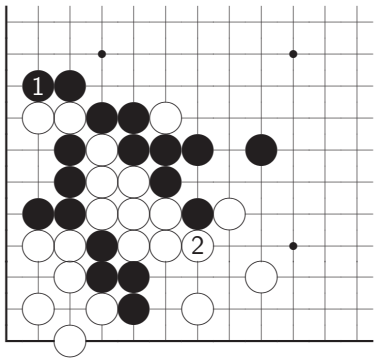

2 3
1 4

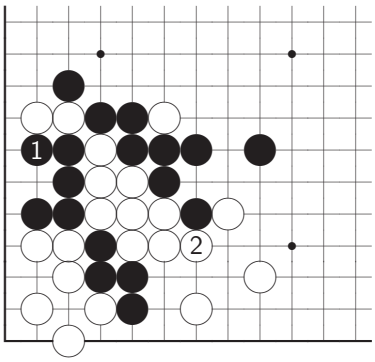

1
2
3
4

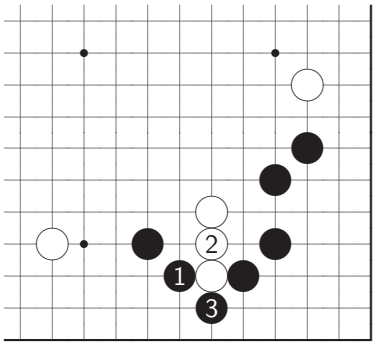

1
2
4
3

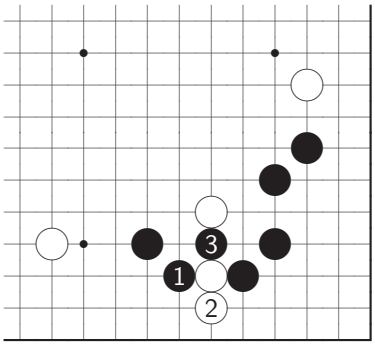

1
2
5
4
6
3

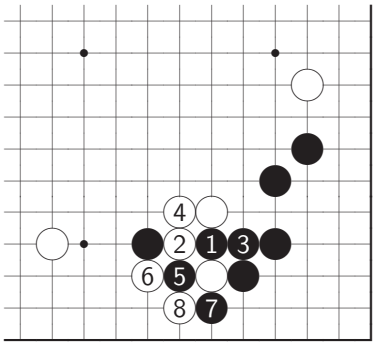

1
2
6
4
5
3

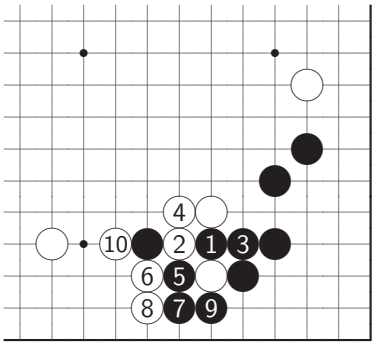

1
2

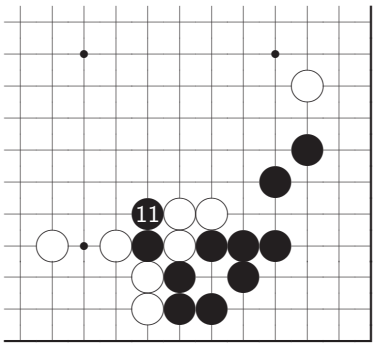

1
2

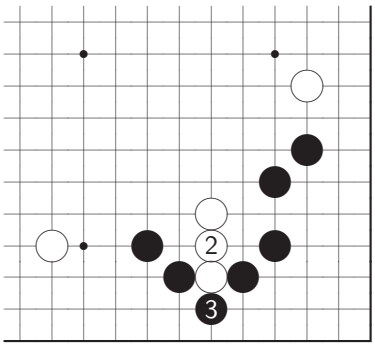

2
1
3

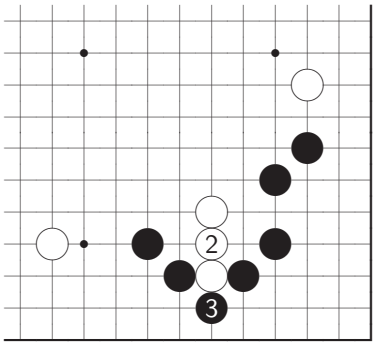

3
1
2

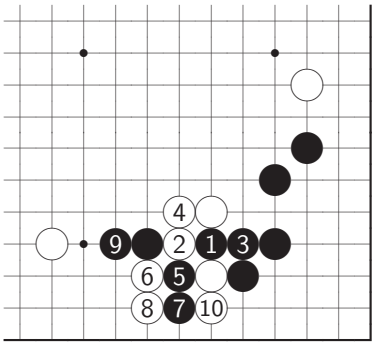

4
2
1
3
6
5
8
7

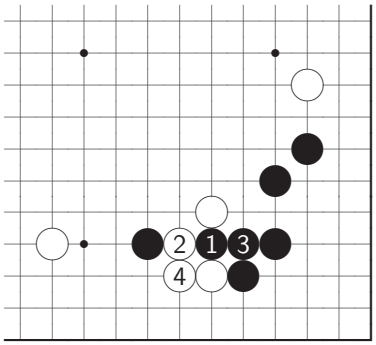

4
10
2
1
3
6
5
8
7
9

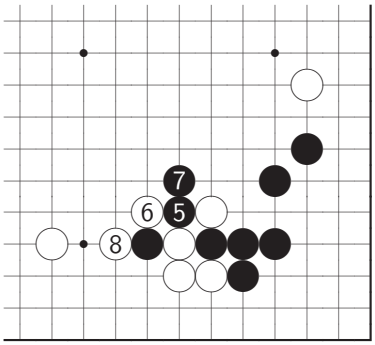

11

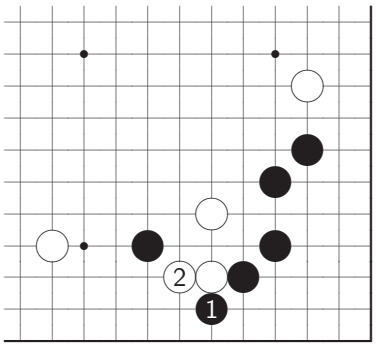

2
3

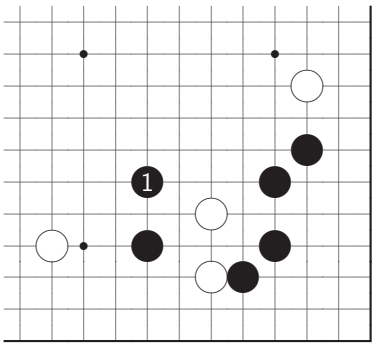

2
3

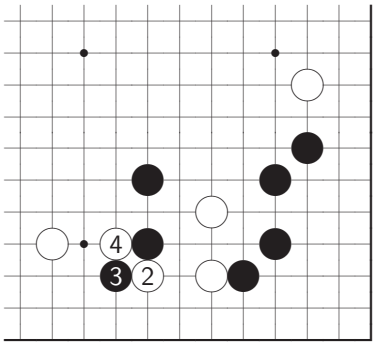

4
9
2
1
3
6
5
8
7
10

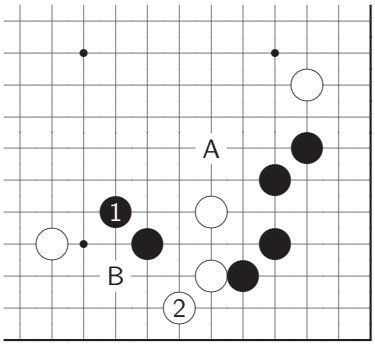

2
1
3
4

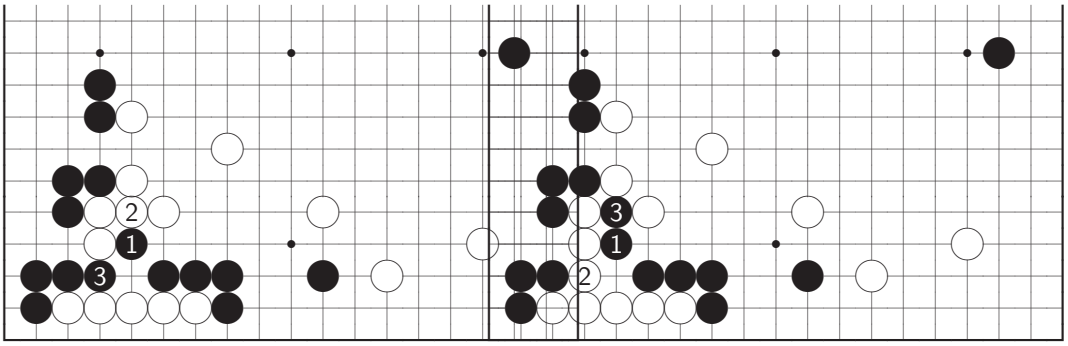

7
6
5
8

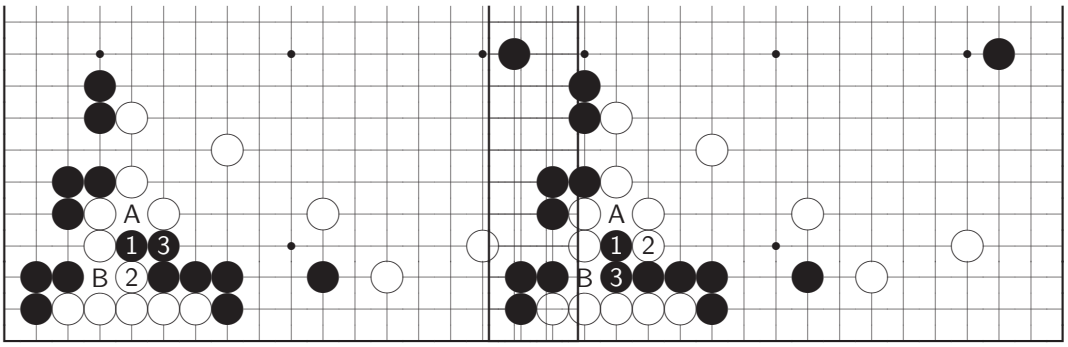

2
1

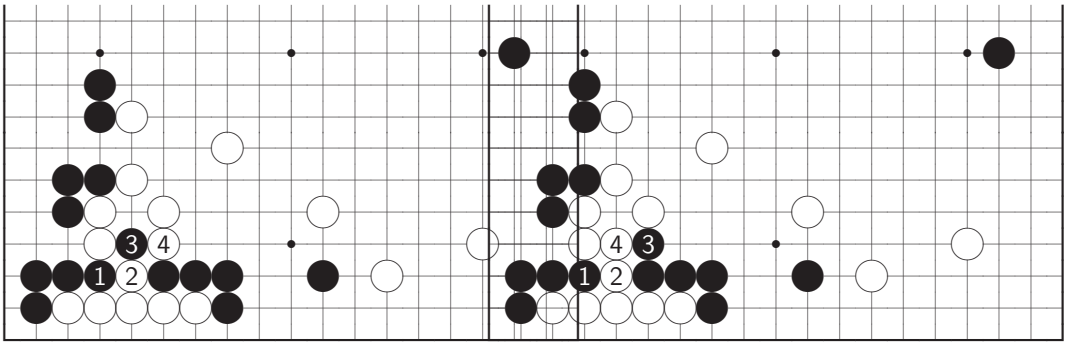

1

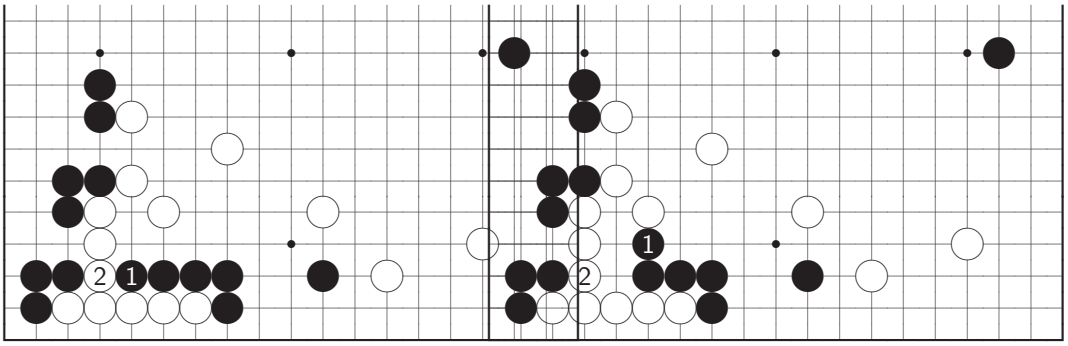

4
3
2

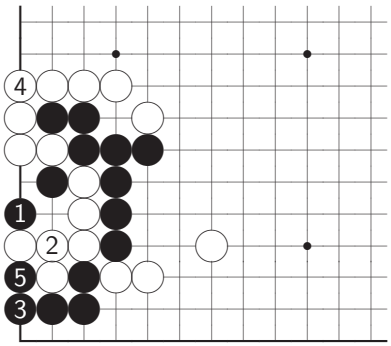

A
1
B
2

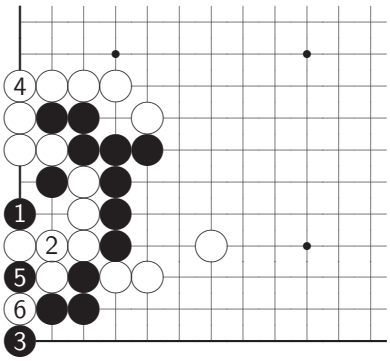

2
1
3
3
1
2

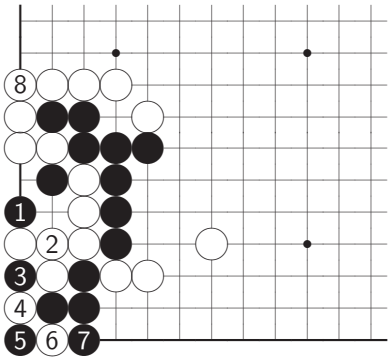

A
1
3
B
2
A
1
2
B
3

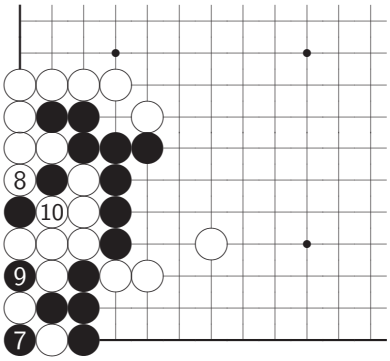

3 4
1 2
4 3
1 2

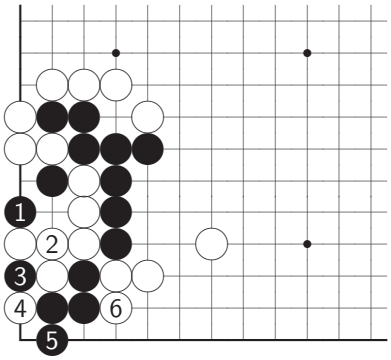

2 1
1
2

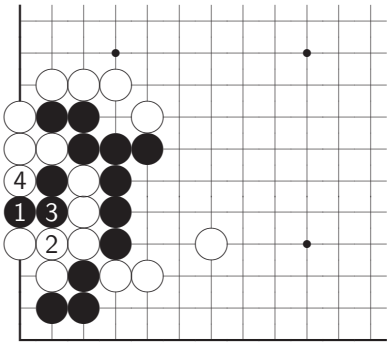

4
1
2
5
3

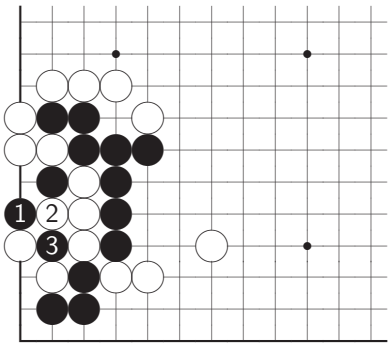

4
1
2
5
6
3

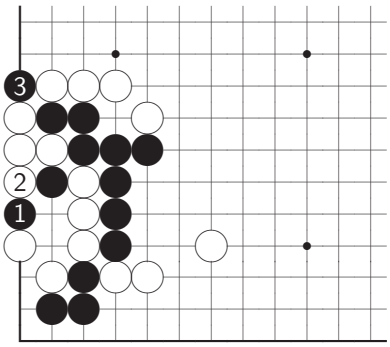

8
1
2
3
4
5
6
7

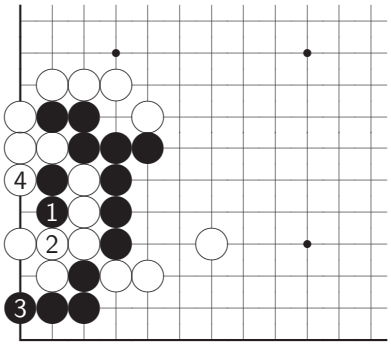

8
10
9
7

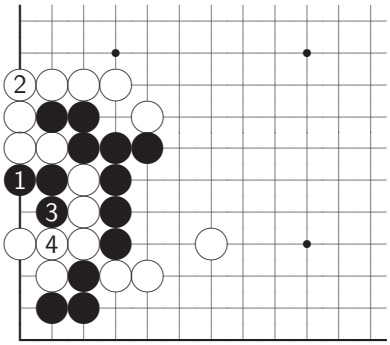

1
2
3
4
6
5

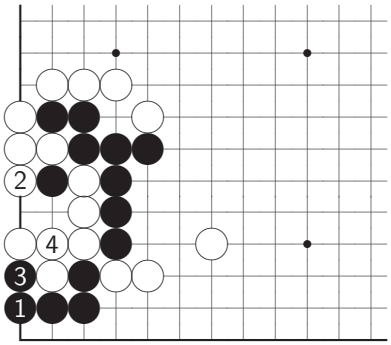

4
1
3
2

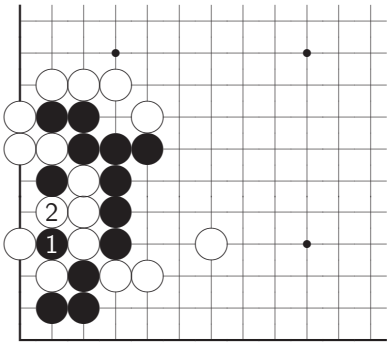

1
2
3

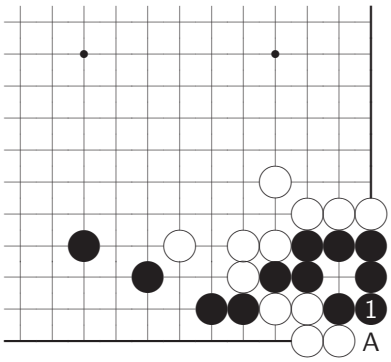

3
2
1

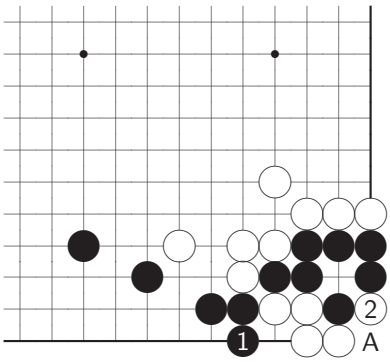

4
1
2
3

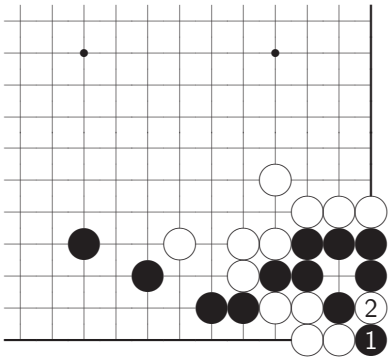

2
1
3
4

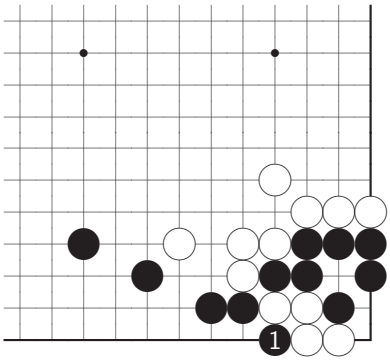

2
4
3
1

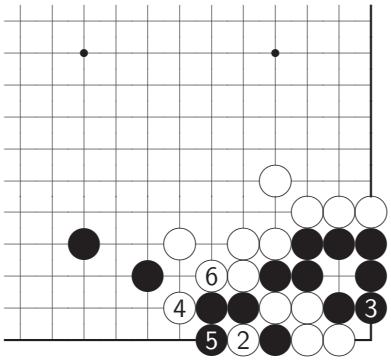

2
1

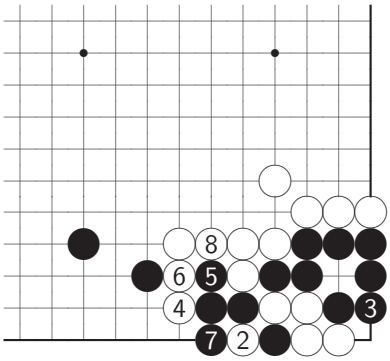

1
A

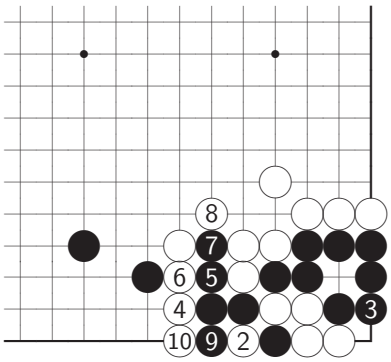

2
1
A

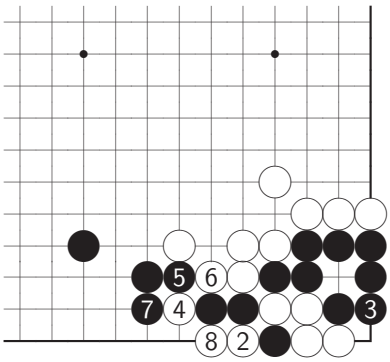

2
1

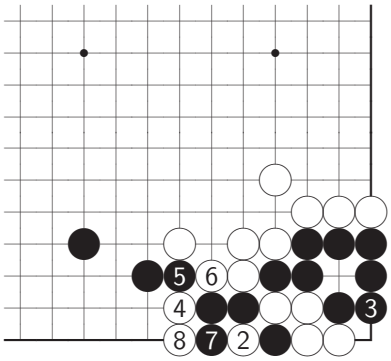

1

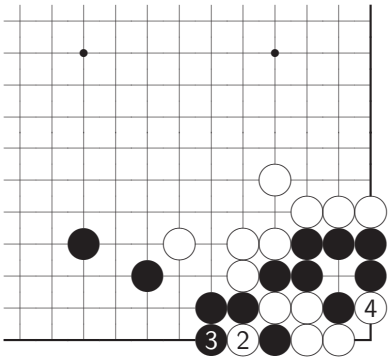

6
4
3
5
2

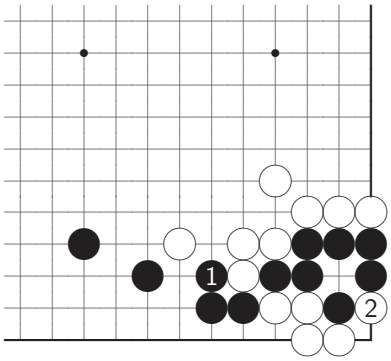

8
6
5
4
3
7
2

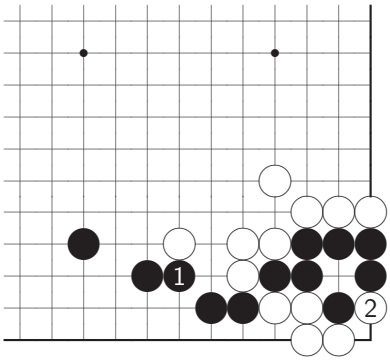

8
7
6
5
4
3
10
9
2

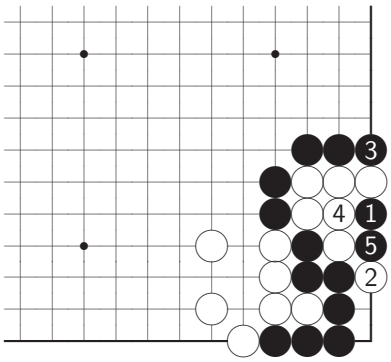

5
6
7
4
3
8
2

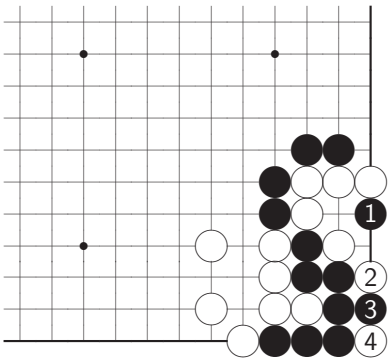

5 6
4 3
8 7 2

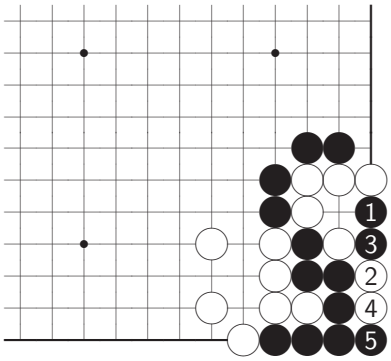

4
3 2

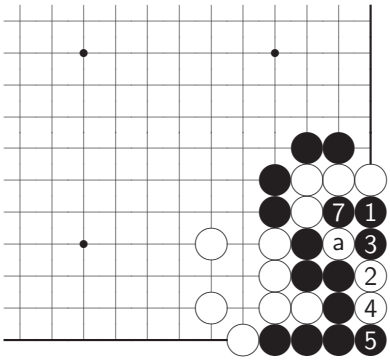

1
2

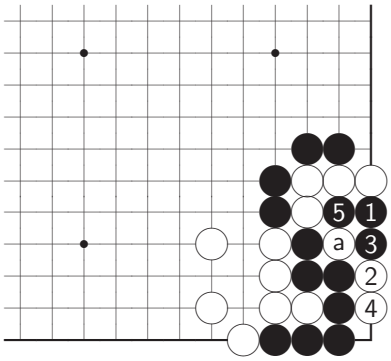

1
2

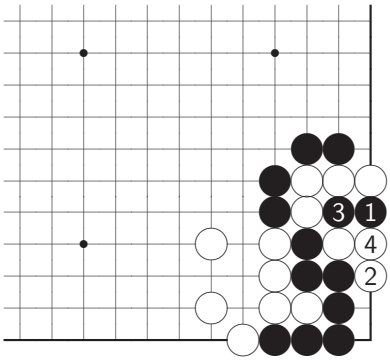

3
4 1
5
2

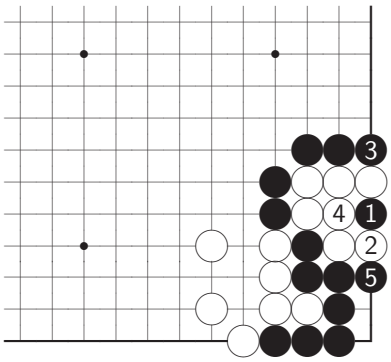

1
2
3
4

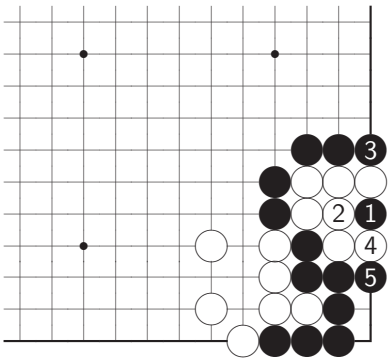

1
3
2
4
5

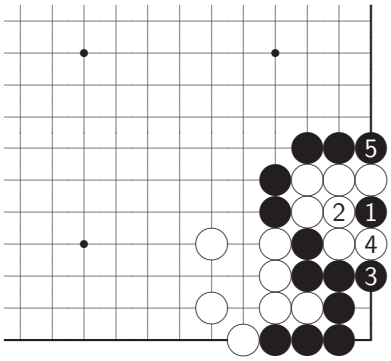

7
1
a
3
2
4
5

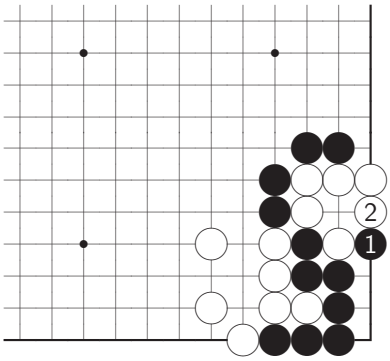

5
1
a
3
2
4

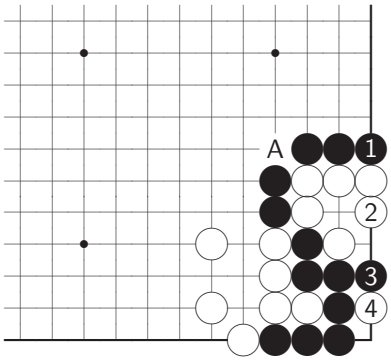

3
1
4
2

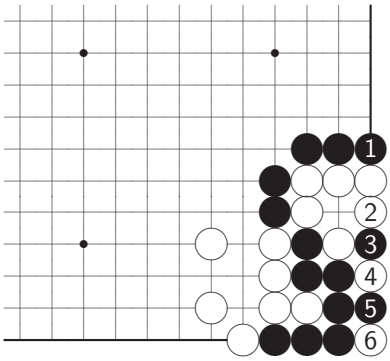

3
4
1
2
5

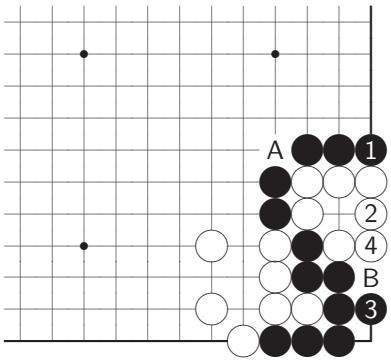

3
2
1
4
5

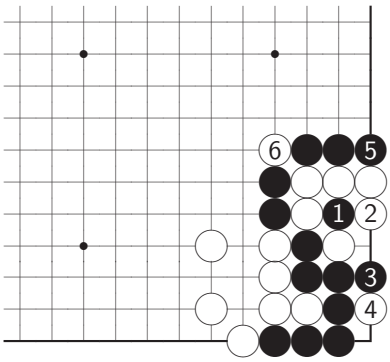

5
2
1
4
3

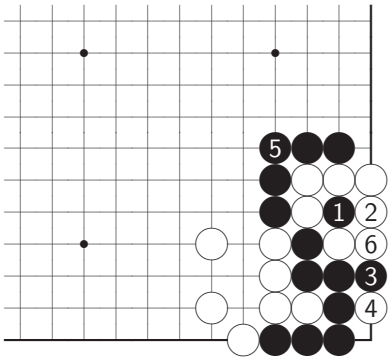

2
1

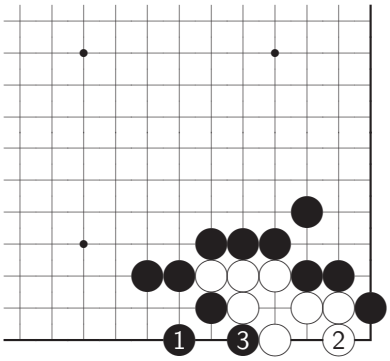

A
1
2
3
4

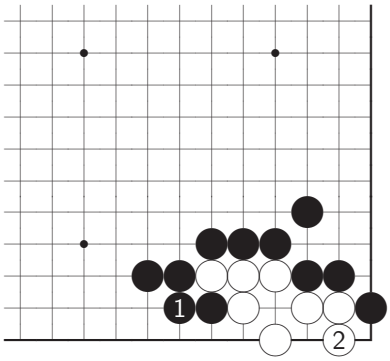

1
2
3
4
5
6

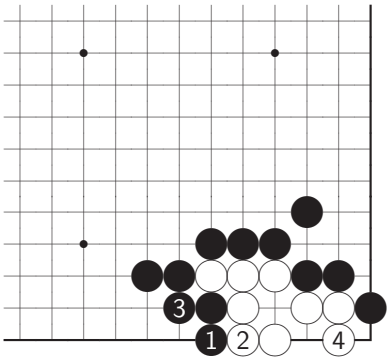

A
1
2
4
B
3

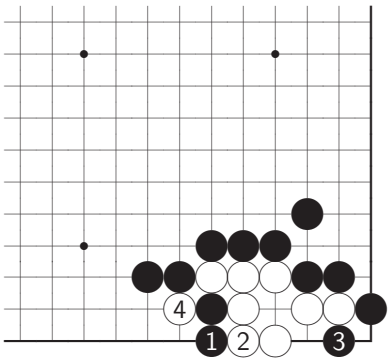

6
5
1
2
3
4

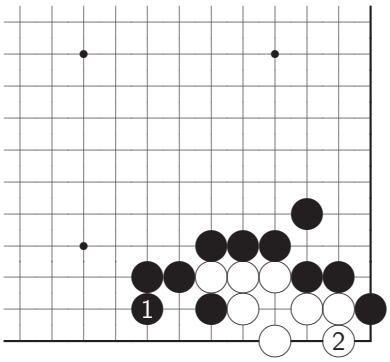

5
1
2
6
3
4

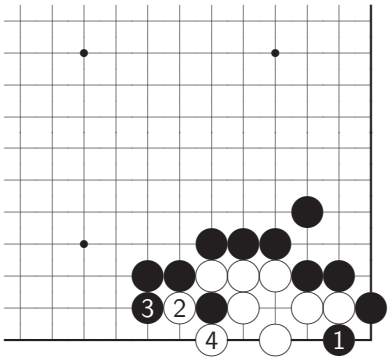

1
3
2

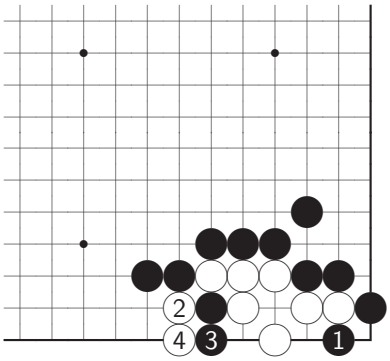

1
2

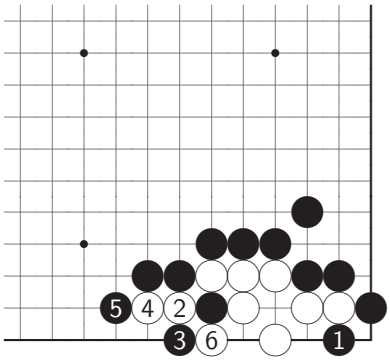

3
1
2
4

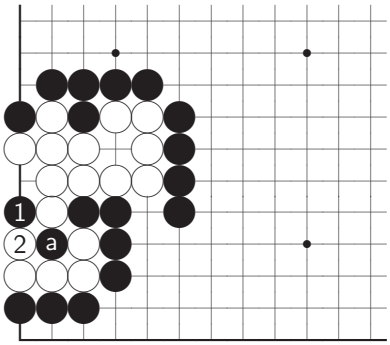

4
1
2
3

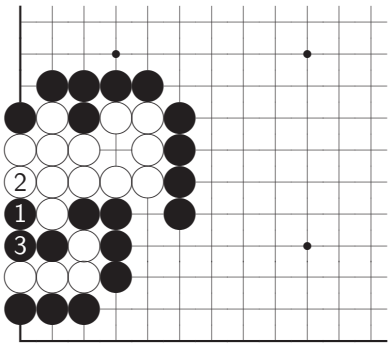

1
2

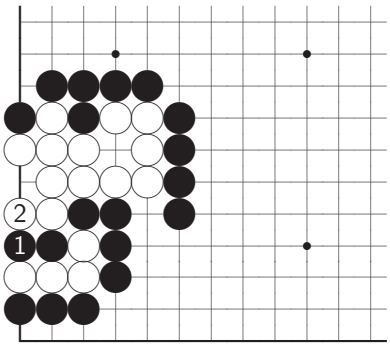

3
2
4
1

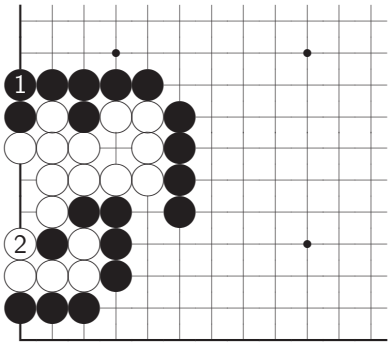

2
4
3
1

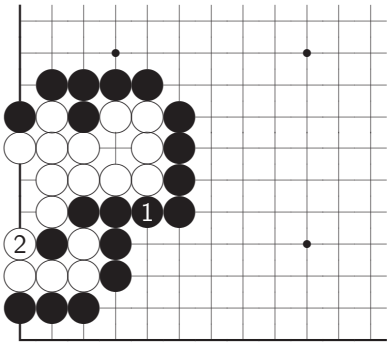

5
4
2
3
6
1

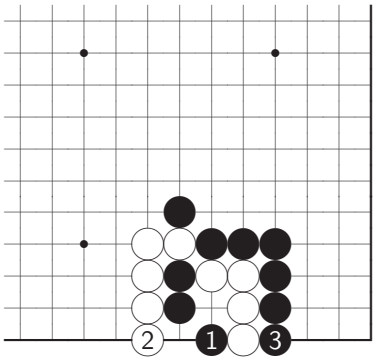

1
2
a

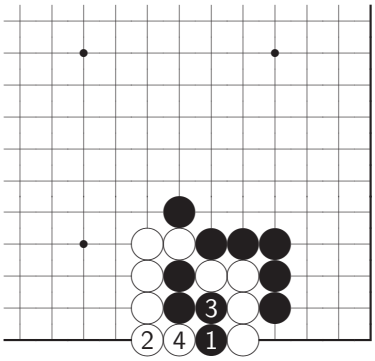

2
1
3

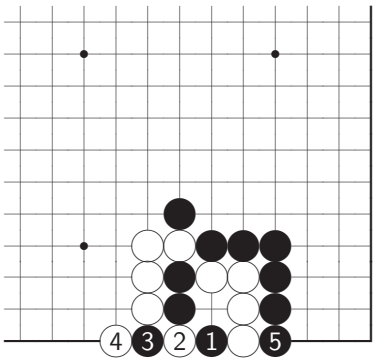

2
1

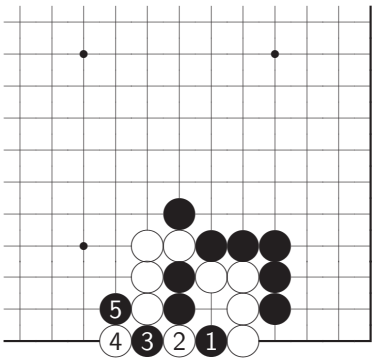

1
2

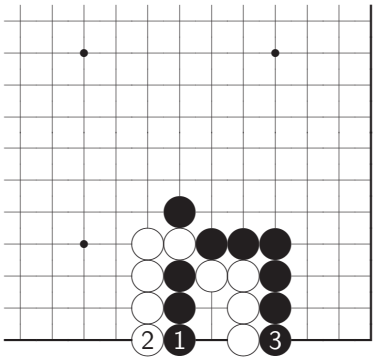

1
2

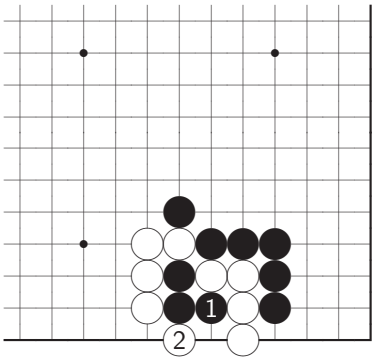

2
1
3

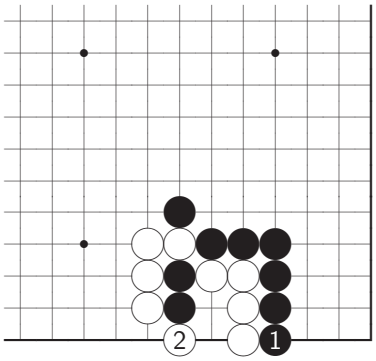

3
2
4
1

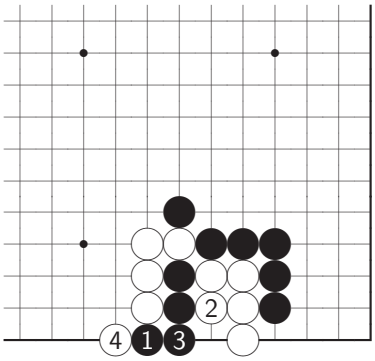

4
3
2
1
5

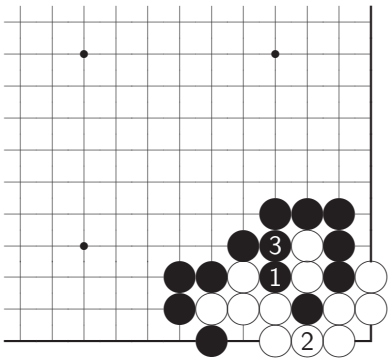

5
4
3
2
1

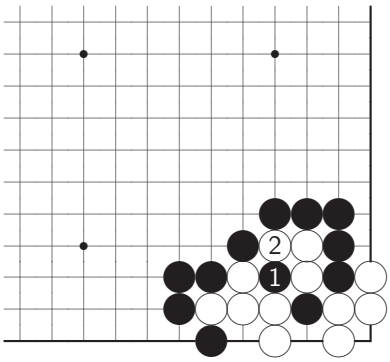

2
1
3

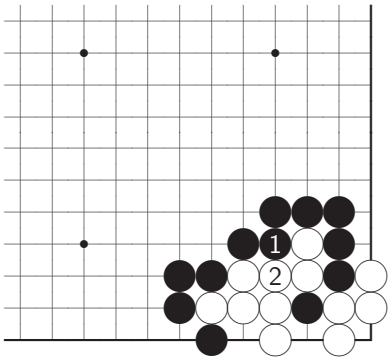

1
2

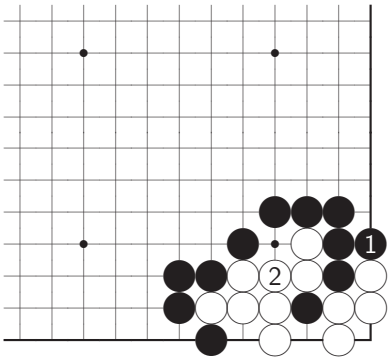

2
1

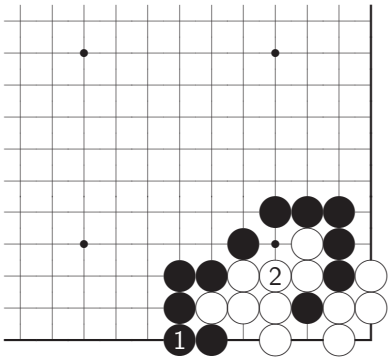

2
4
1
3

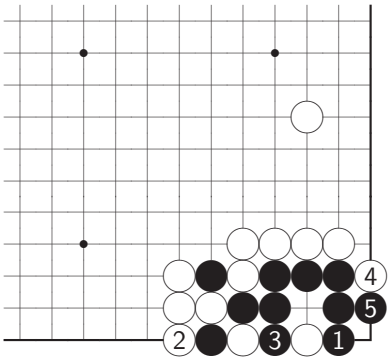

3
1
2

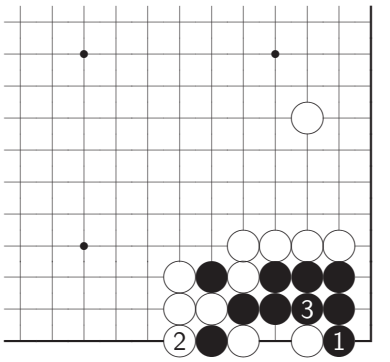

2
1

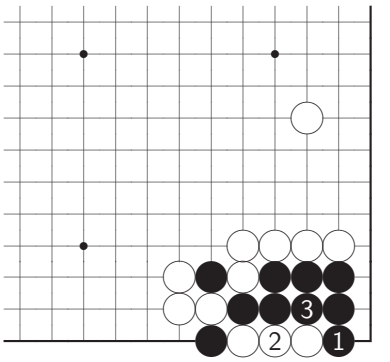

1
2

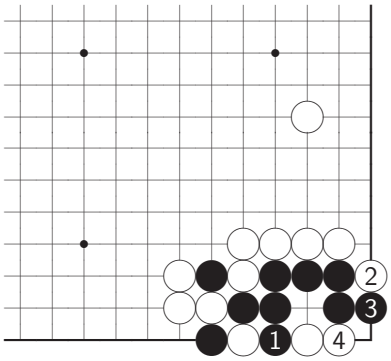

1
2

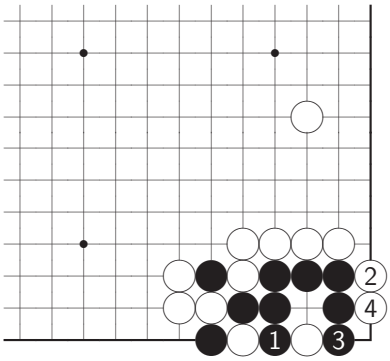

2
1

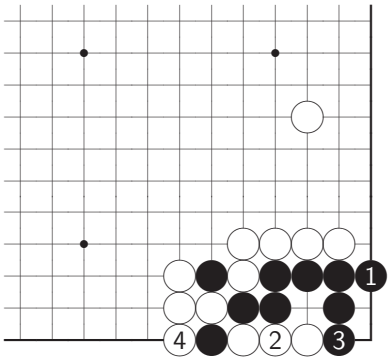

4
5
2
3
1

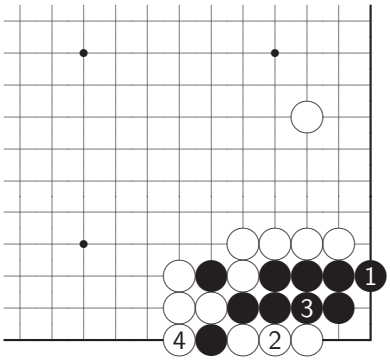

3
2
1

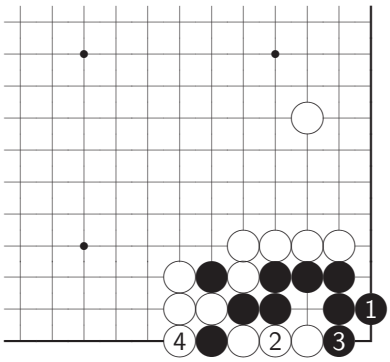

3
2
1

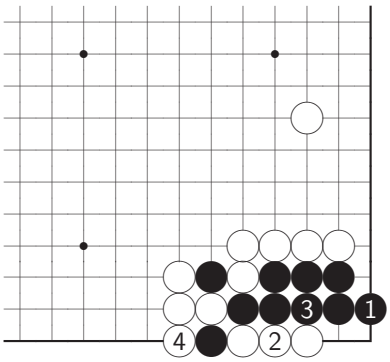

2
3
1
4

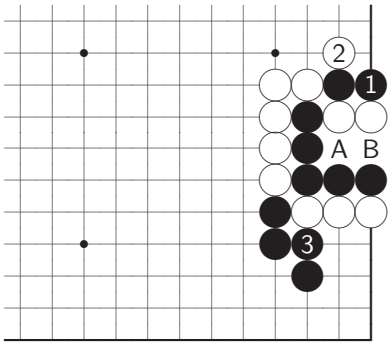

2
4
1
3

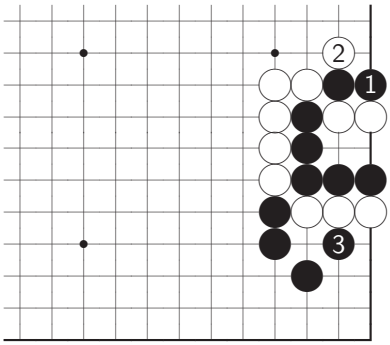

1
4
2
3

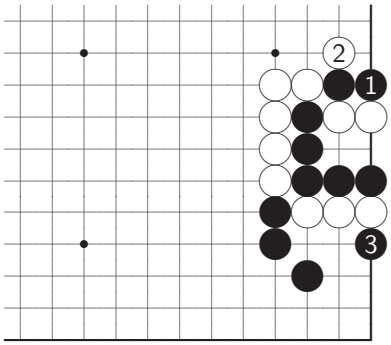

1
3
4
2

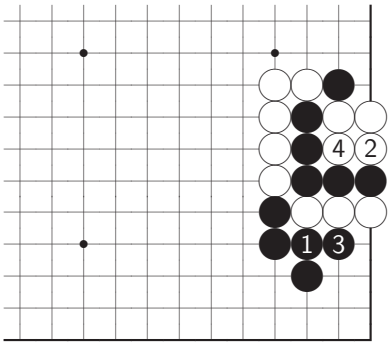

1
4
2
3

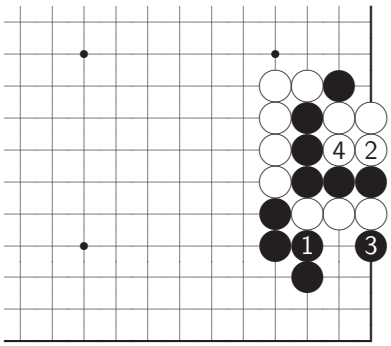

3
1
4
2

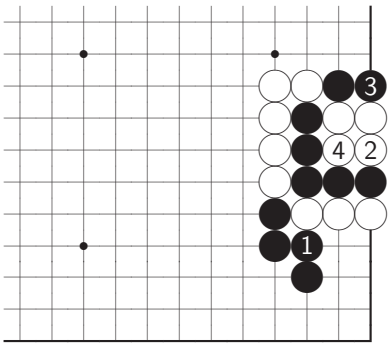

2
1
A B
3

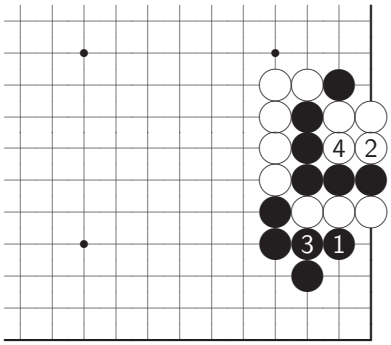

2
1
3

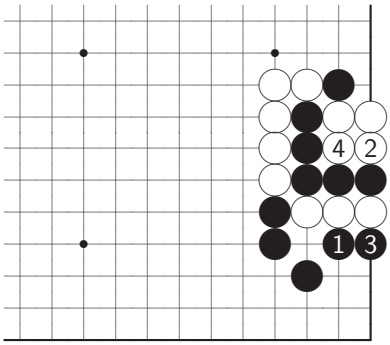

2
1
3

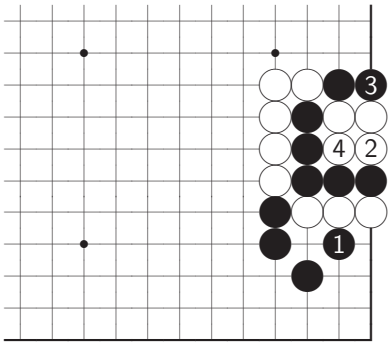

4 2
1 3

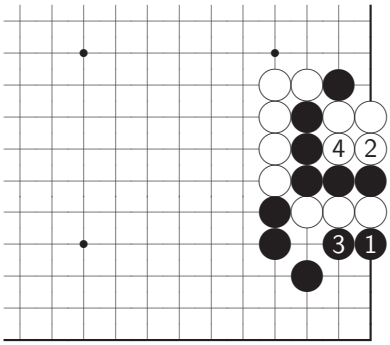

4 2
1 3

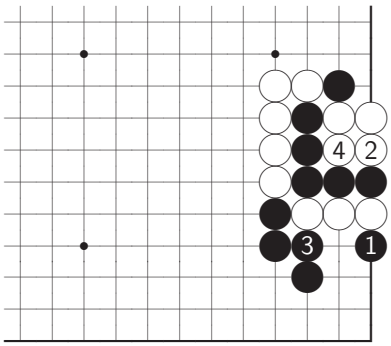

3
4 2
1

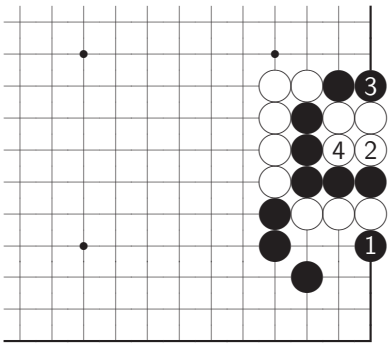

4 2
3 1

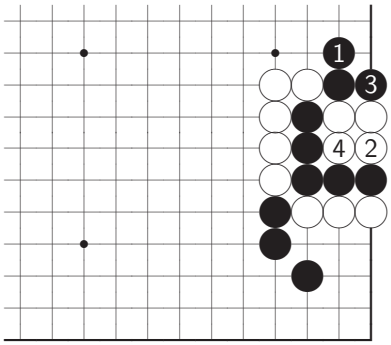

4 2
1 3

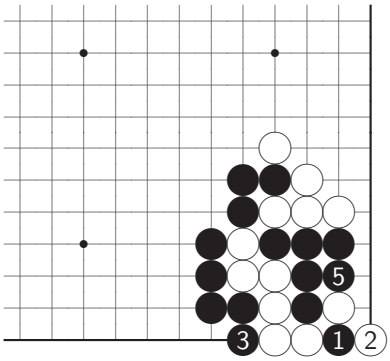

3
4 2
1

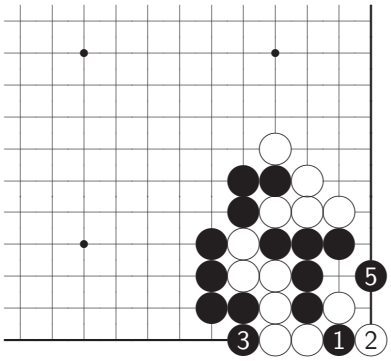

4 2
3 1

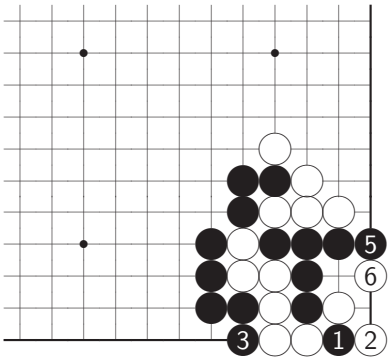

4 2
3 1

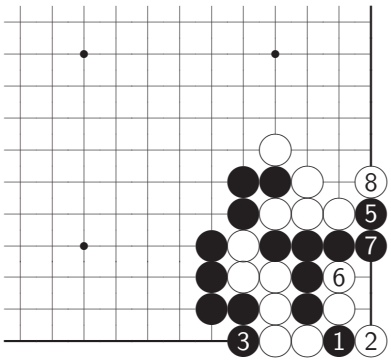

3
4 2
1

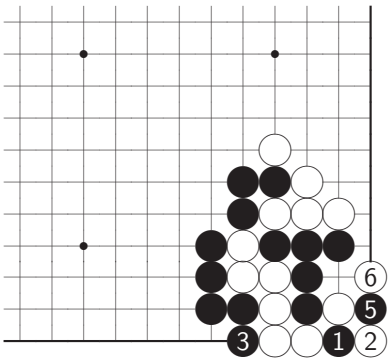

1
3
4
2

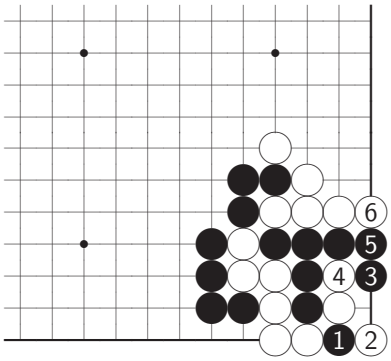

5
3
1
2

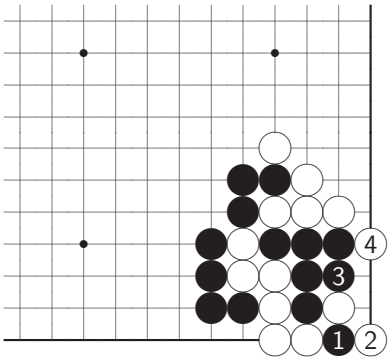

5
3
1
2

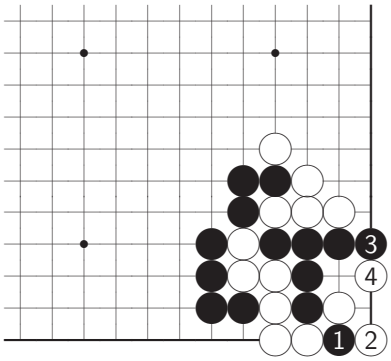

5
6
3
1
2

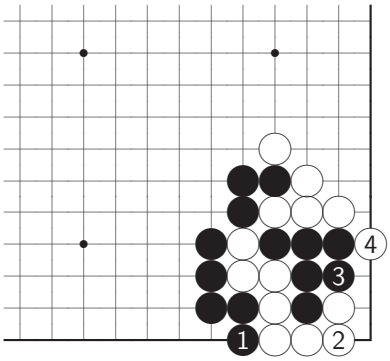

8
5
7
6
3
1
2

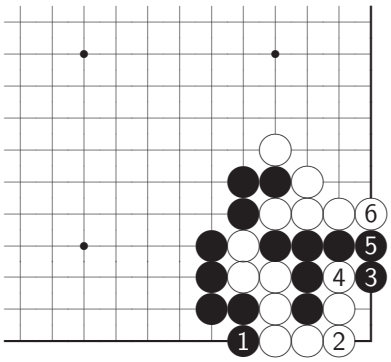

6
5
3
1
2

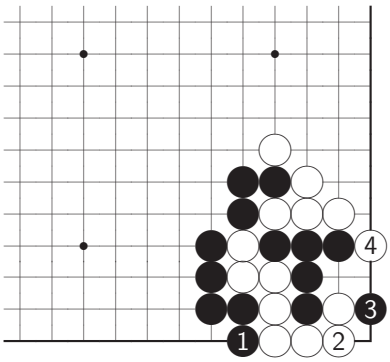

6
5
4
3
1
2

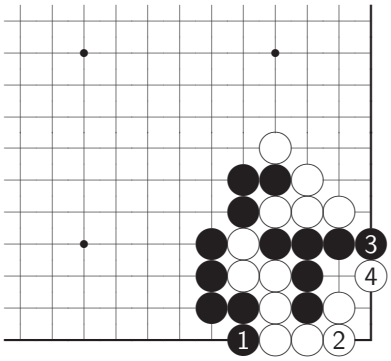

4
3
1
2

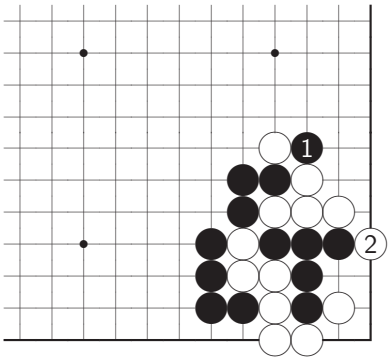

3
4
1
2

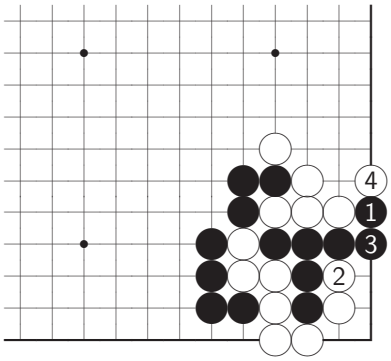

4
3
1
2

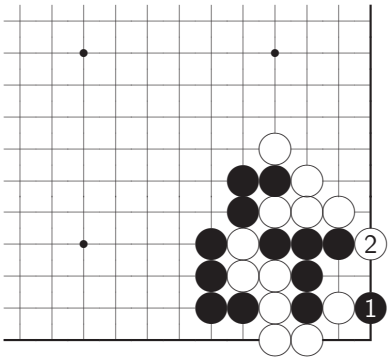

6
5
4
3
1
2

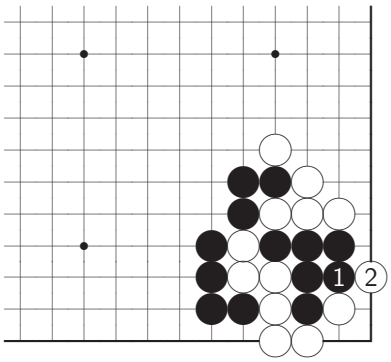

4
3
1
2

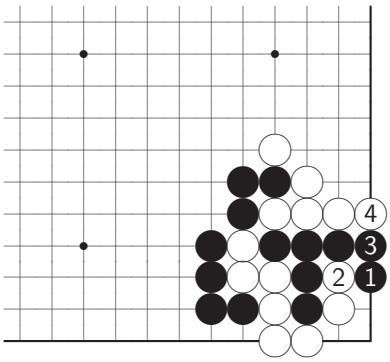

3
4
1
2

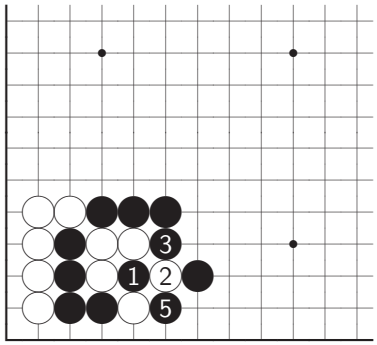

1
2

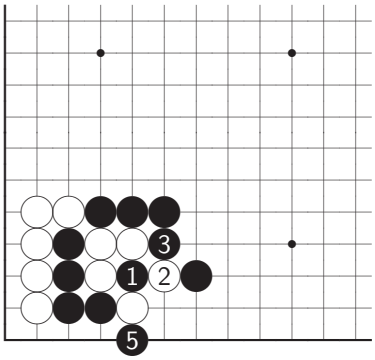

4
1
3
2

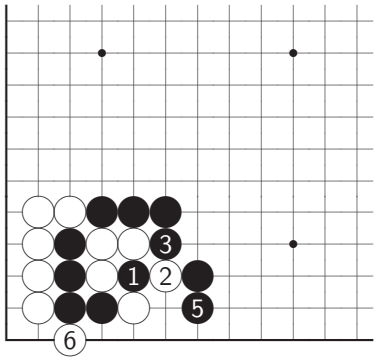

2
1

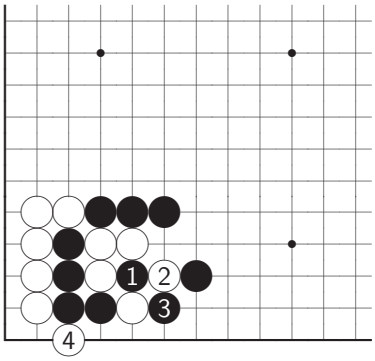

1
2

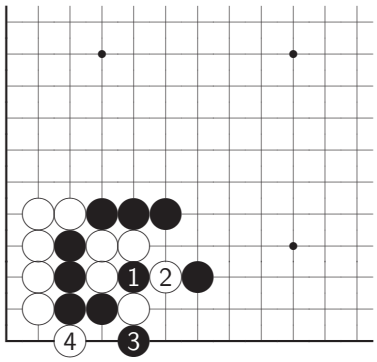

4
3
2
1

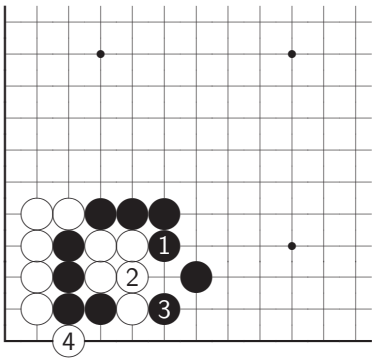

3
1
2
5

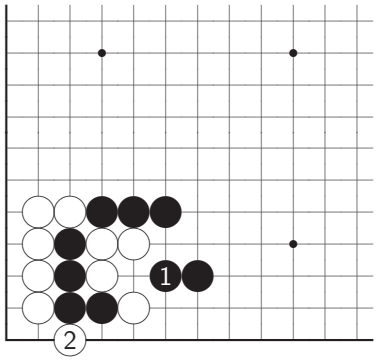

3
1
2
5

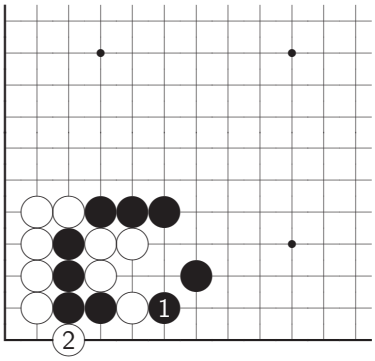

3
1
2
5
6

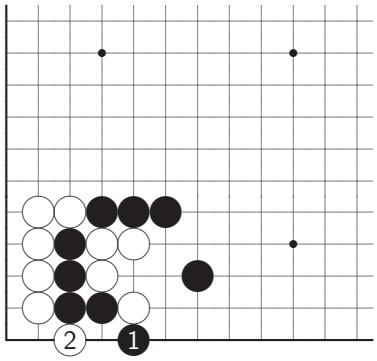

1
2
3
4

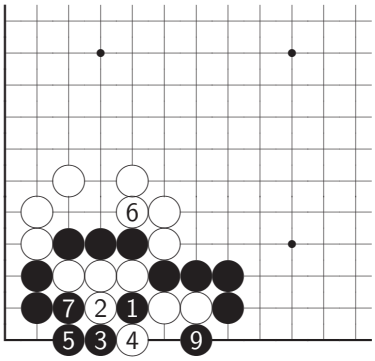

1
2
4
3

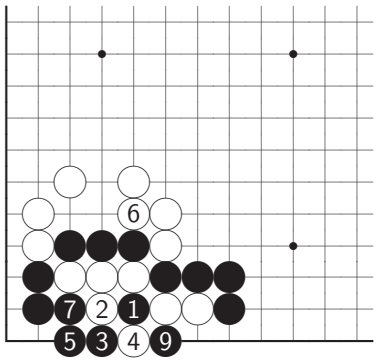

1
2
3
4

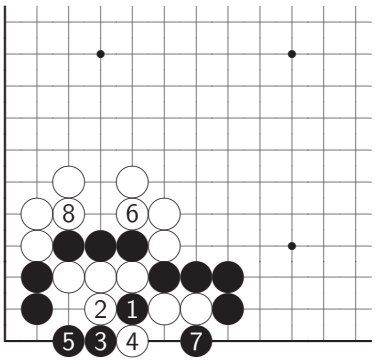

1
2

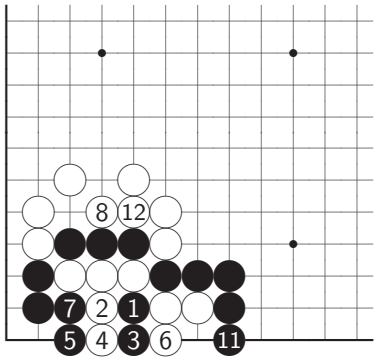

1
2

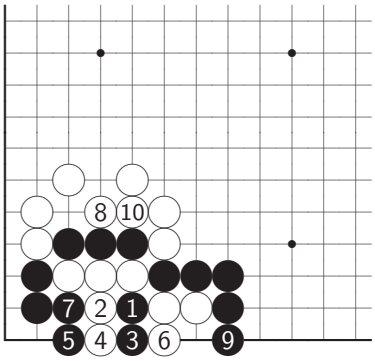

2
1

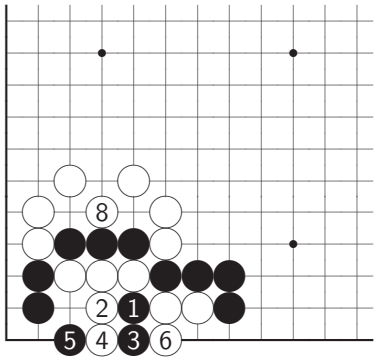

6
7
2
1
5
3
4
9

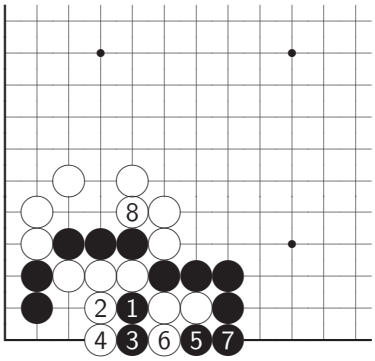

6
7
2
1
5
3
4
9

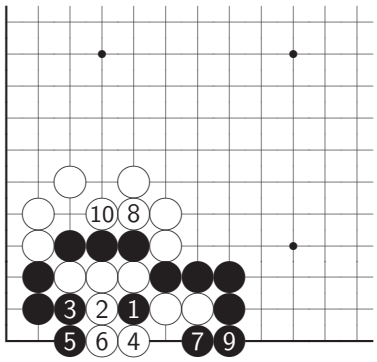

8
6
2
1
5
3
4
7

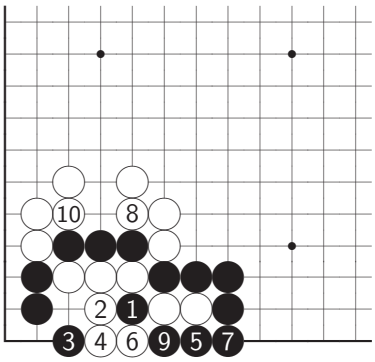

8 12
7 2 1
5 4 3 6 11

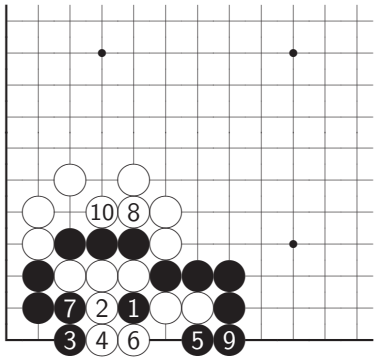

8 10
7 2 1
5 4 3 6 9

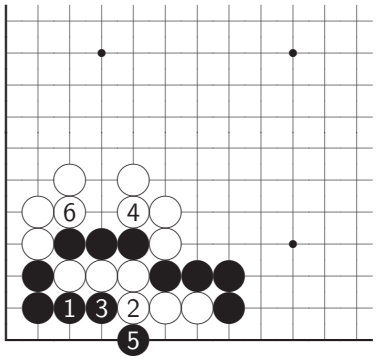

8
2 1
5 4 3 6

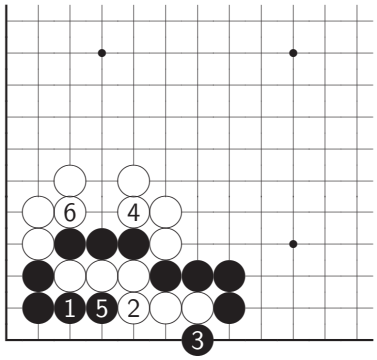

8
2 1
4 3 6 5 7

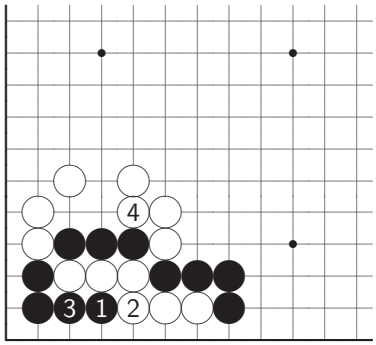

10 8
3 2 1
5 6 4 7 9

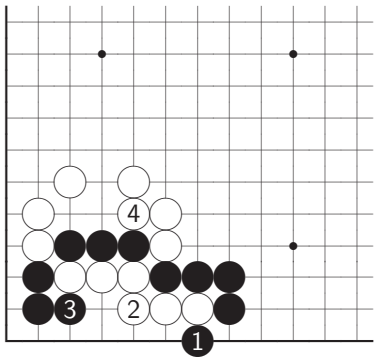

10 8
2 1
3 4 6 9 5 7

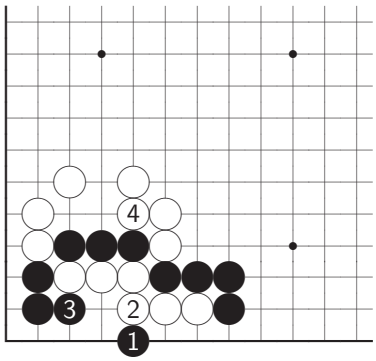

10 8
7 2 1
3 4 6 5 9

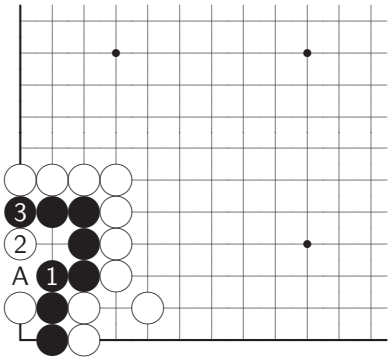

6 4
1 3 2
5

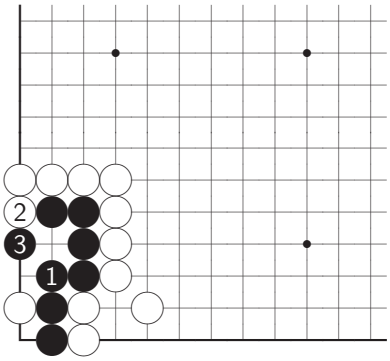

6 4
1 5 2
3

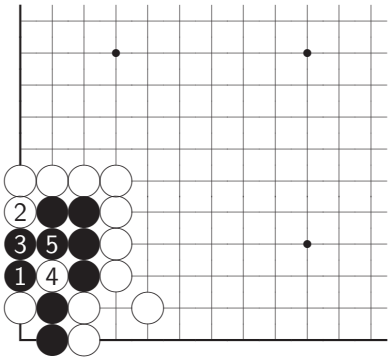

4
3 1 2

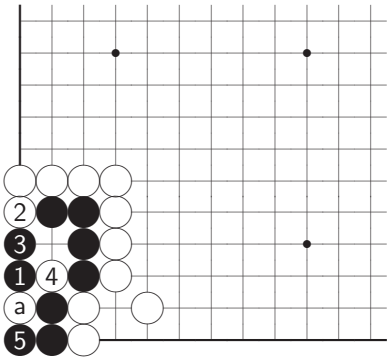

4
3 2
1

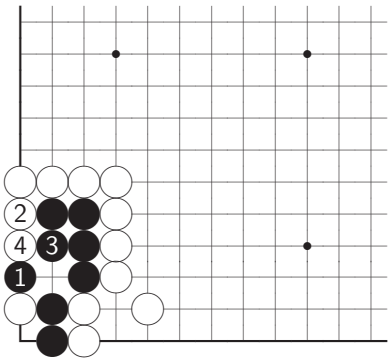

4
3 2
1

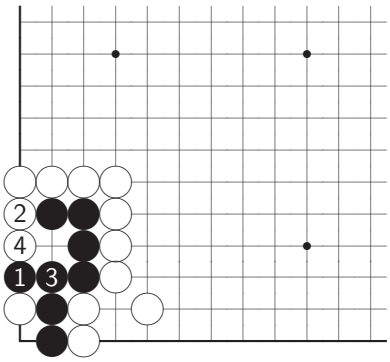

3
2
A 1

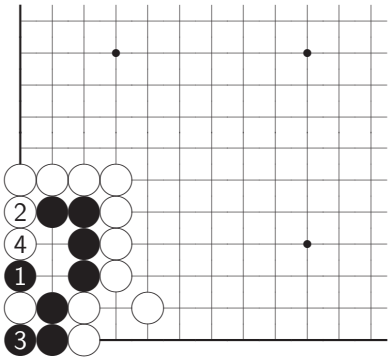

2
3
1

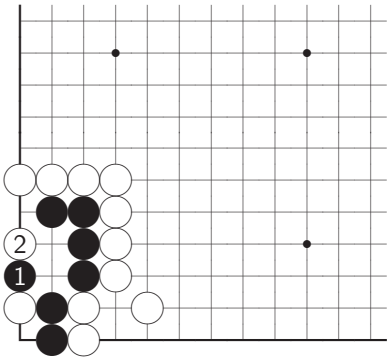

2
3 5
1 4

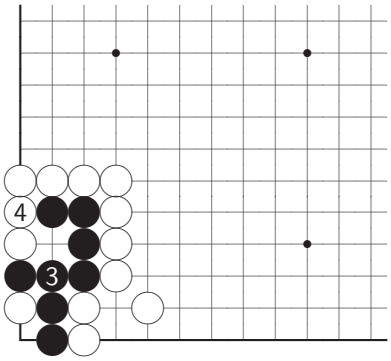

2
3
1 4
a
5

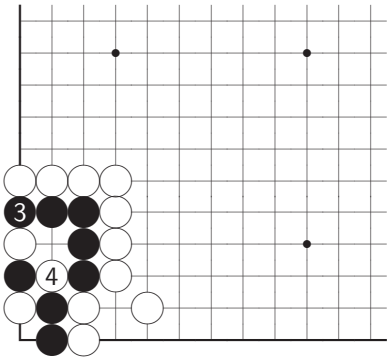

2
4 3
1

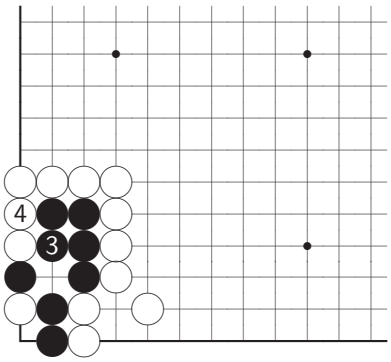

2
4
1 3

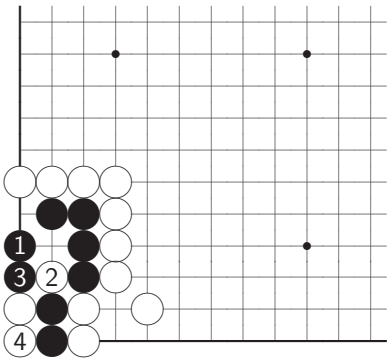

2
4
1
3

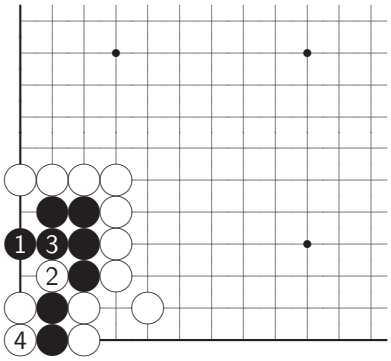

2
1

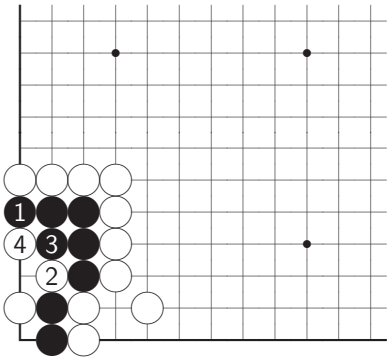

4
3

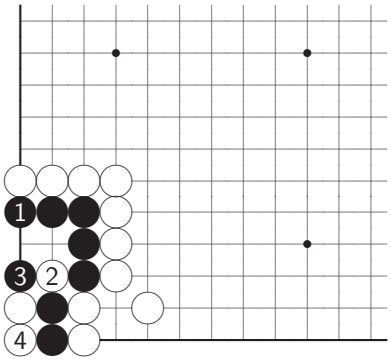

3
4

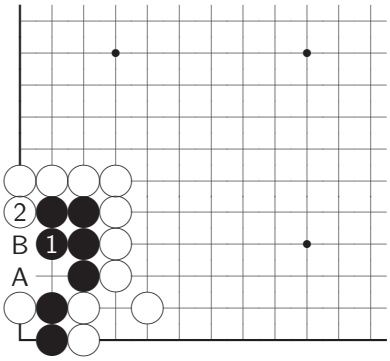

4
3

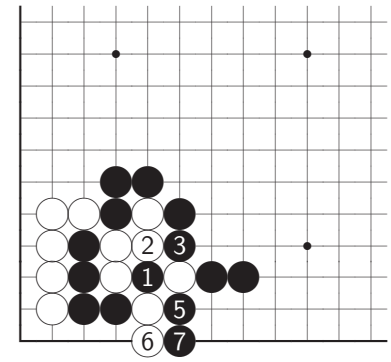

1
3
2
4

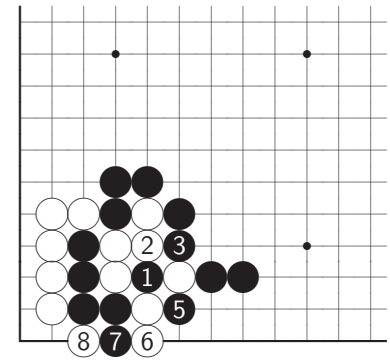

1
3
2
4

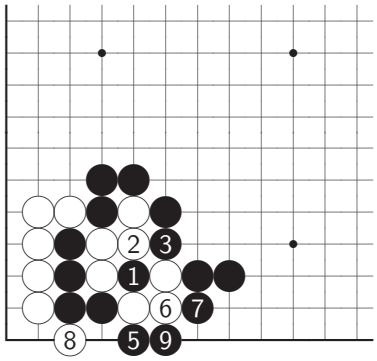

1
4
3
2

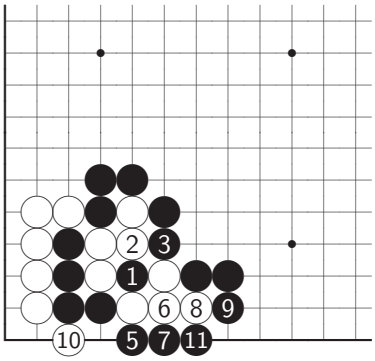

1
3
2
4

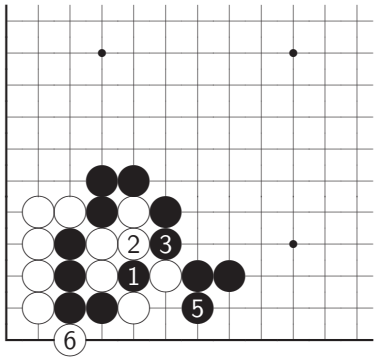

2
B
1
A

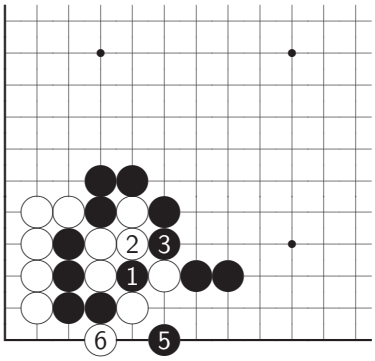

2
3
1
5
6
7

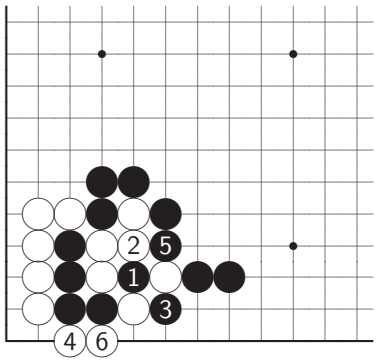

2
3
1
5
8
7
6

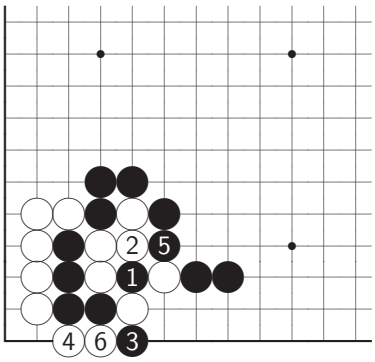

2 3
1
6 7
8 5 9

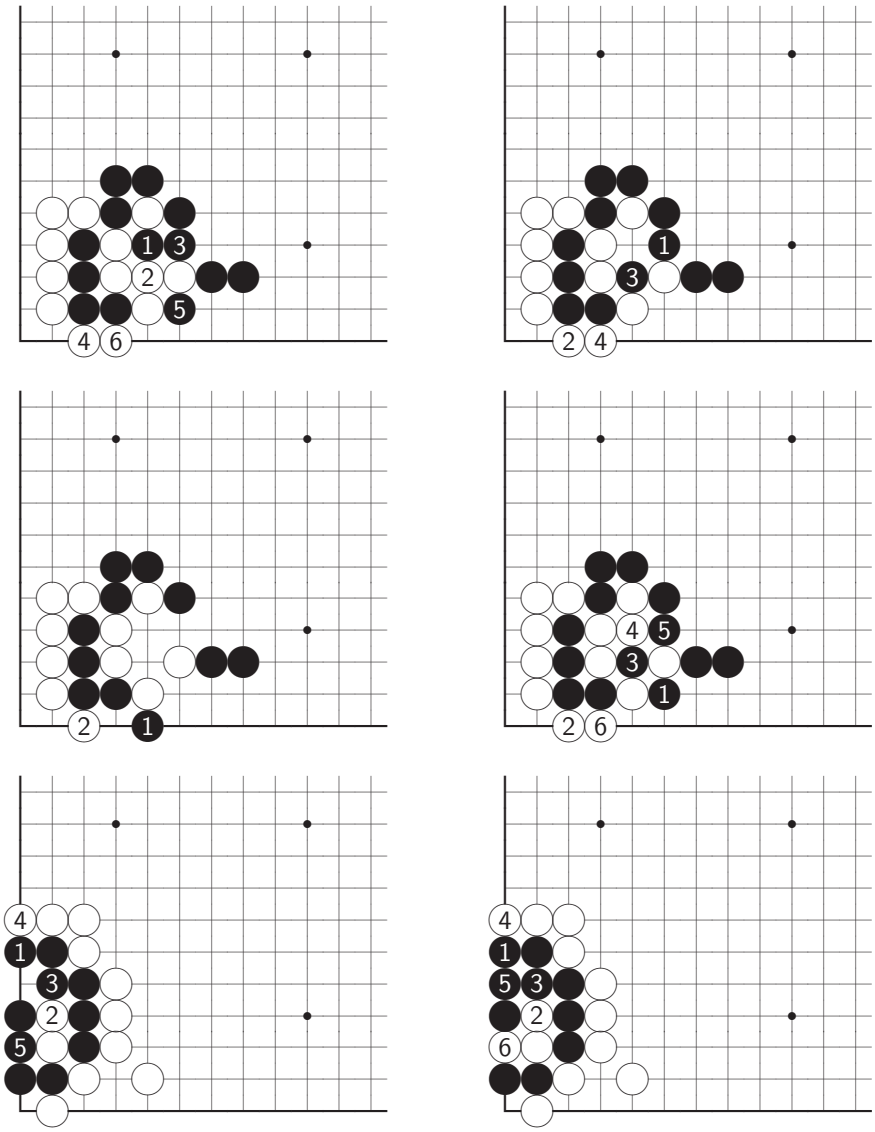

2 3
1
6 8 9
10 5 7 11

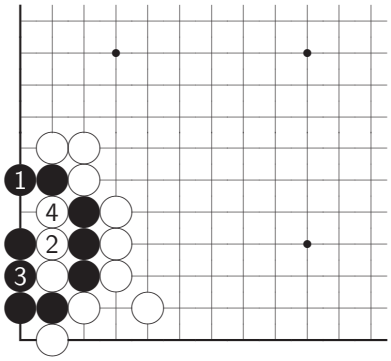

2 3
1
5
6

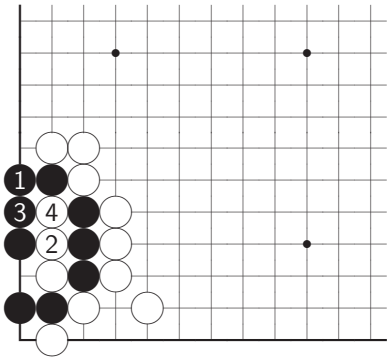

2 3
1
6 5

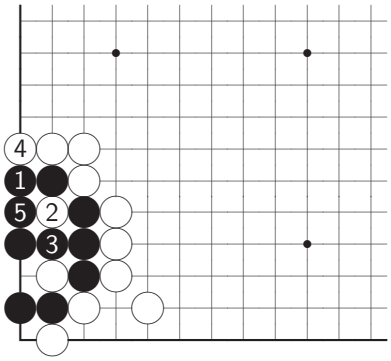

2 5
1
3
4 6

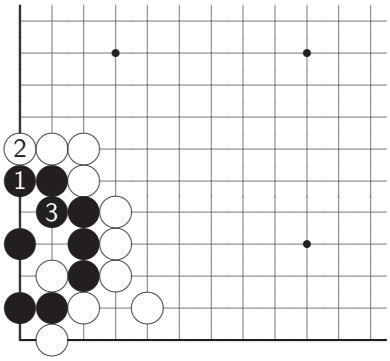

2 5
1
4 6 3

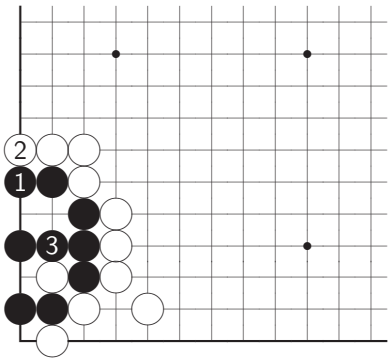

1 3
2
5
4 6
1
3
2 4
2 1
4 5
3
1
2 6
4
1
3
2
5
4
1
5 3
2
6

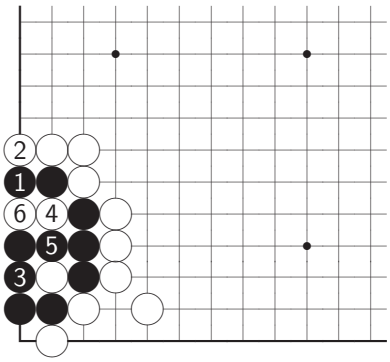

1
4
2
3

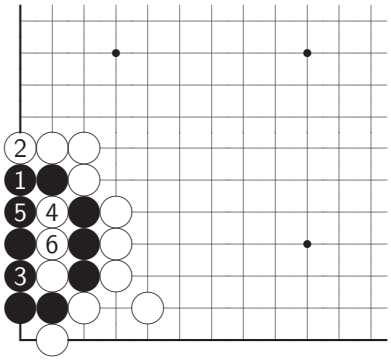

1
3
4
2

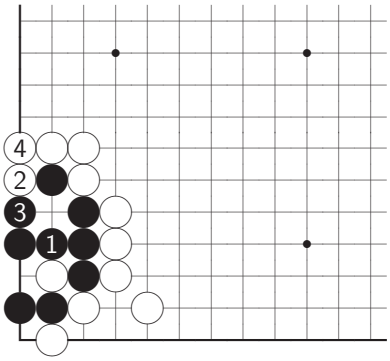

4
1
5
2
3

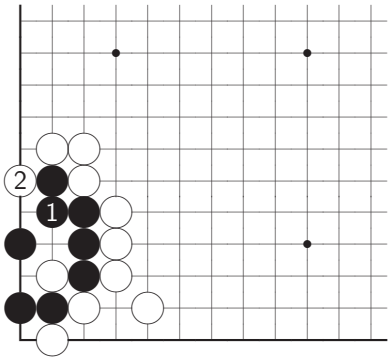

2
1
3

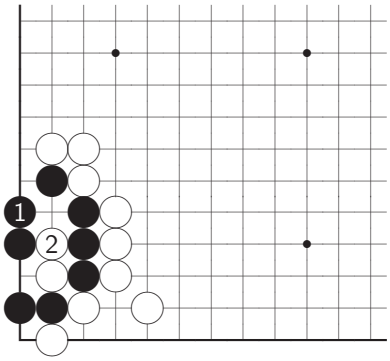

2
1
3

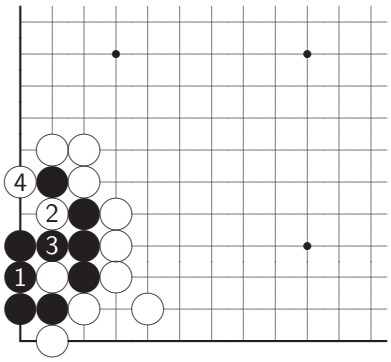

2
1
6
4
5
3

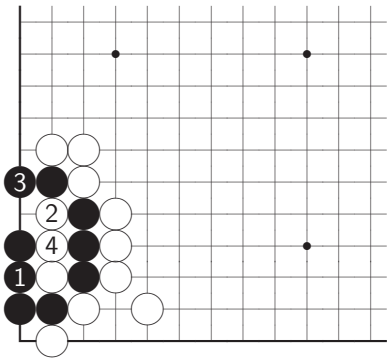

2
1
5
4
6
3

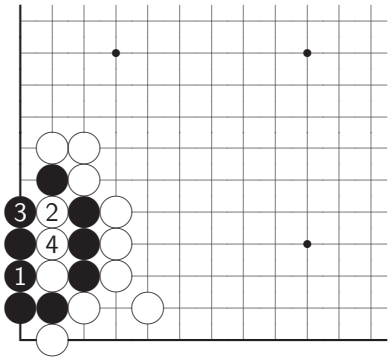

4
2
3
1

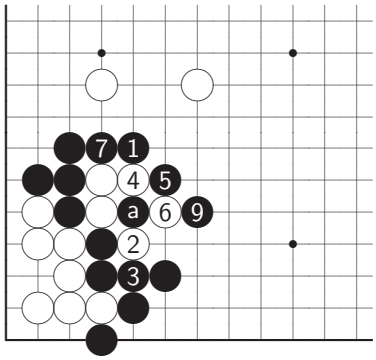

2
1

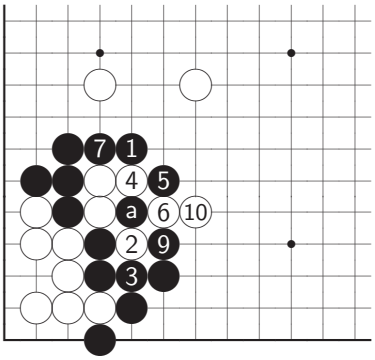

1
2

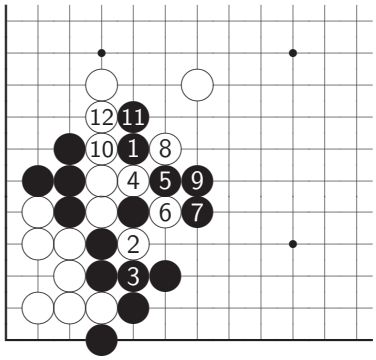

4
2
3
1

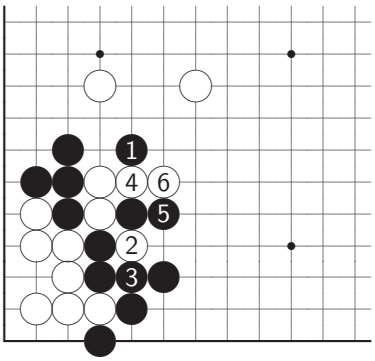

3
2
4
1

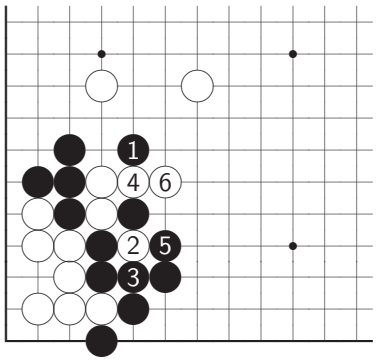

3 2
4
1

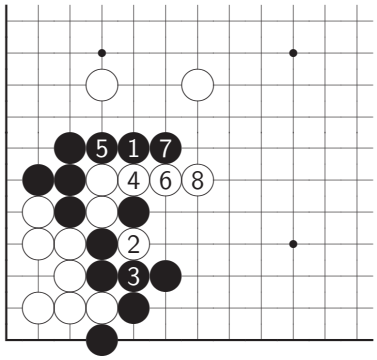

7 1
4 5
a 6 9
2
3

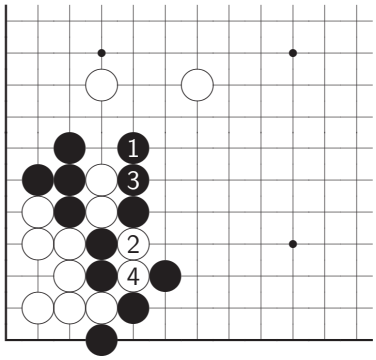

7 1
4 5
a 6 10
2 9
3

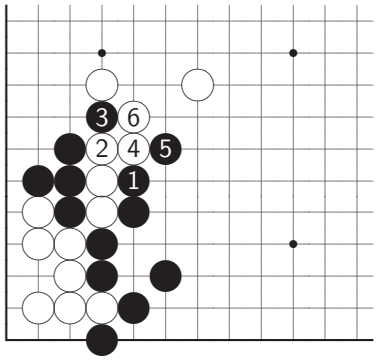

12 11
10 1 8
4 5 9
6 7
2
3

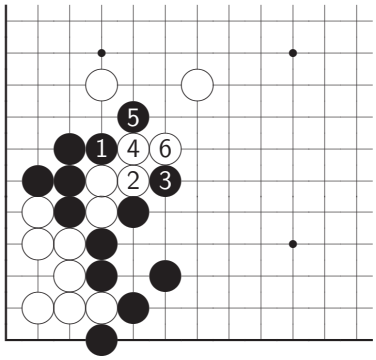

1
4 6
5
2
3

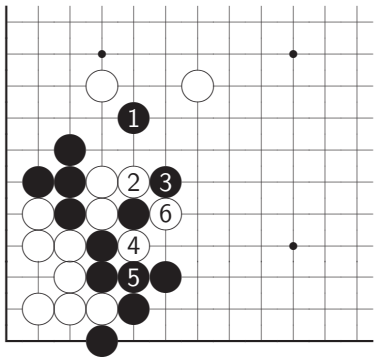

1
4 6
2 5
3

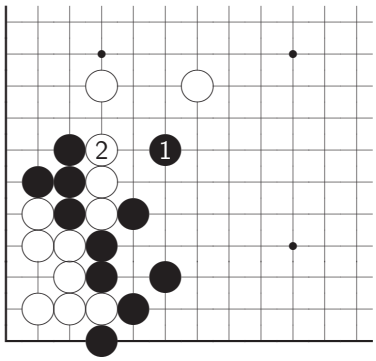

5 1 7
4 6 8
2
3

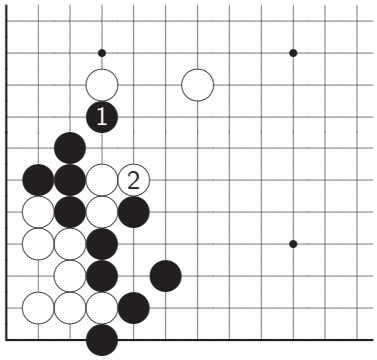

1
3
2
4

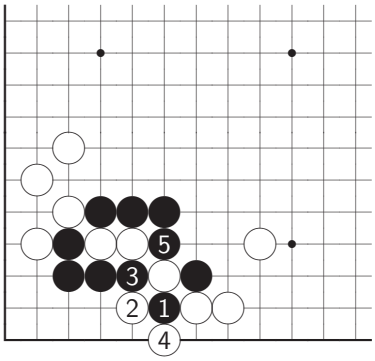

3 6
2 4 5
1

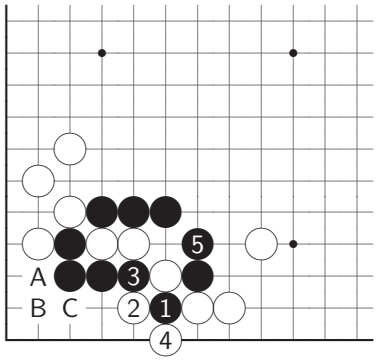

5
1 4 6
2 3

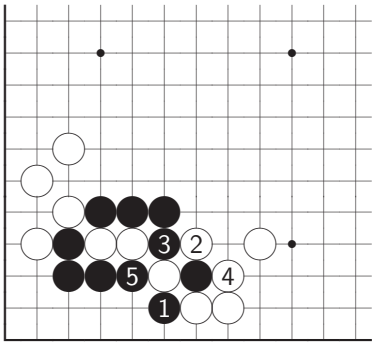

1
2 3
6
4
5

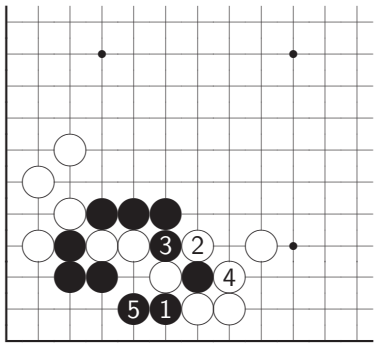

2 1

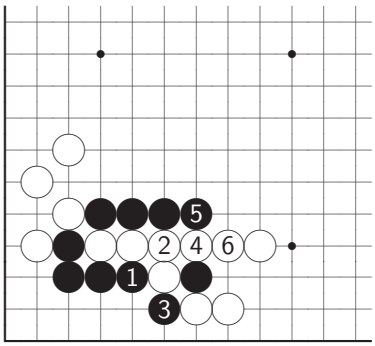

1
2

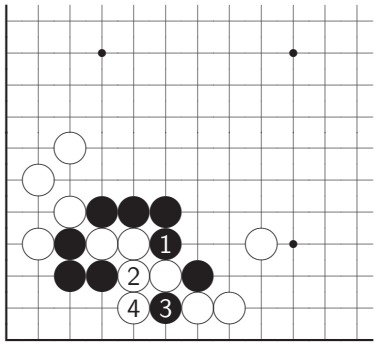

5
3
2
1
4

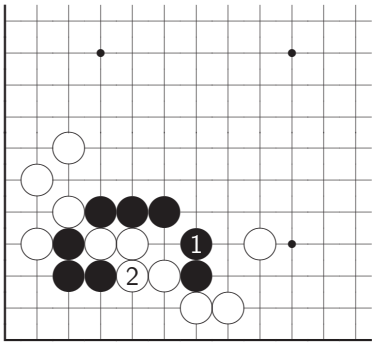

5
A
3
B C
2
1
4

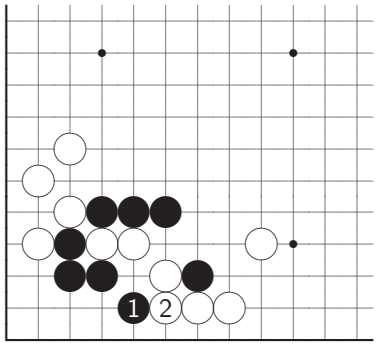

3
2
5
4
1

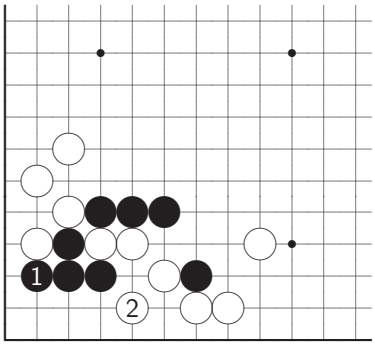

3
2
4
5
1

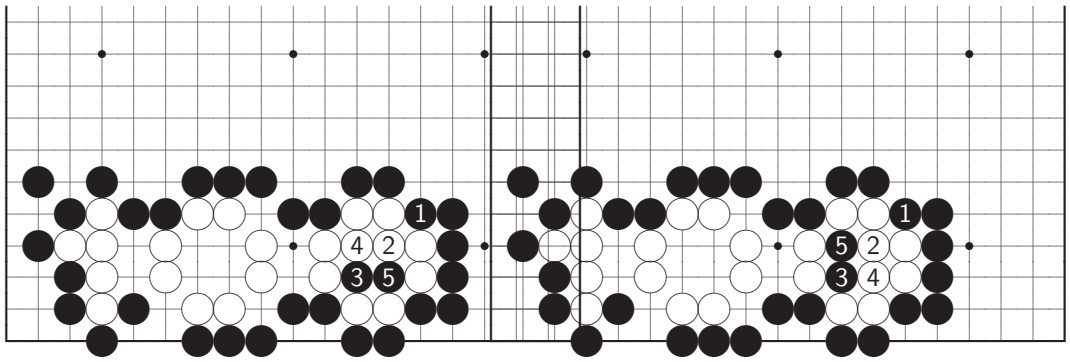

5
2
4
6
1
3

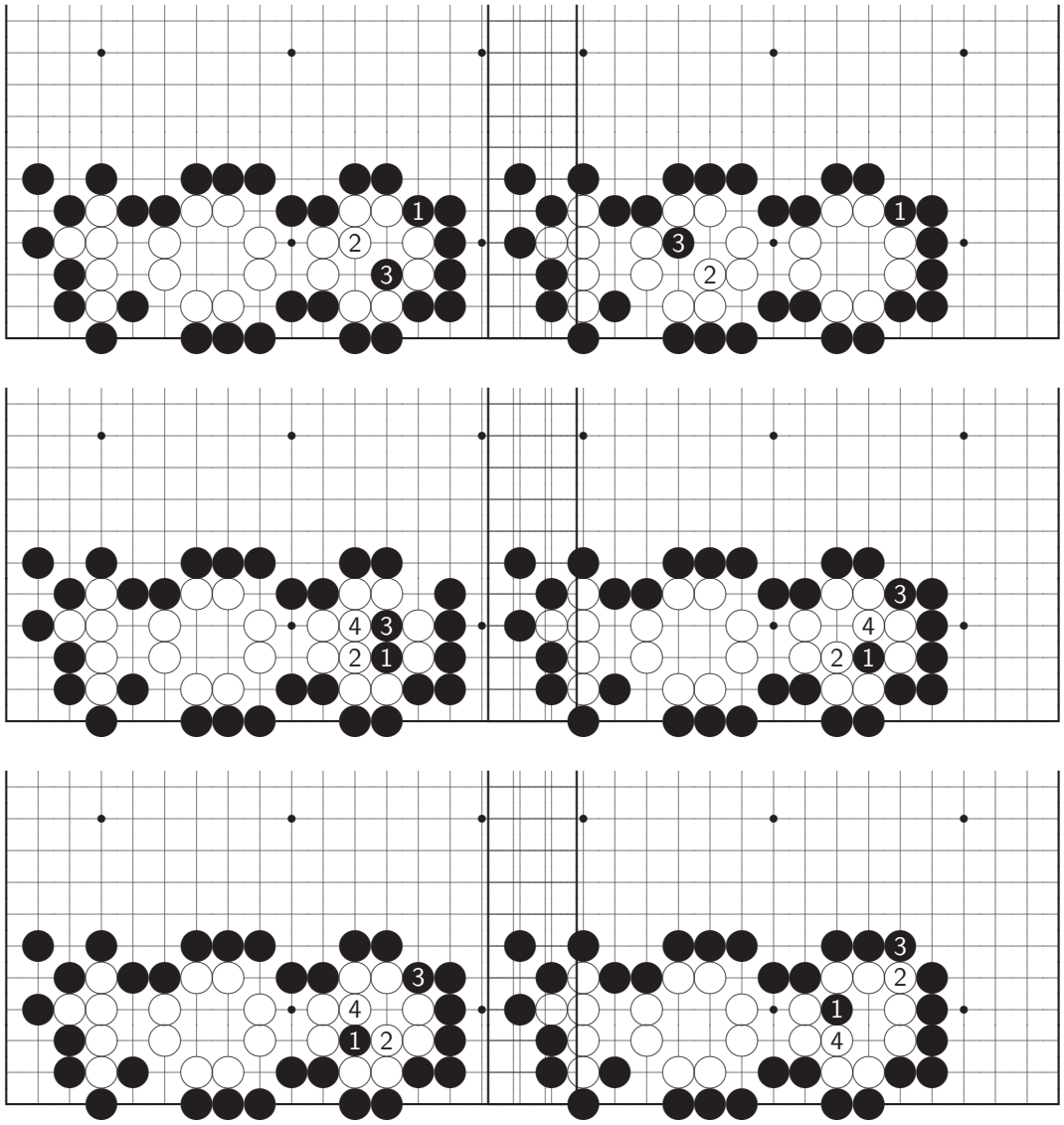

1
2
4
3

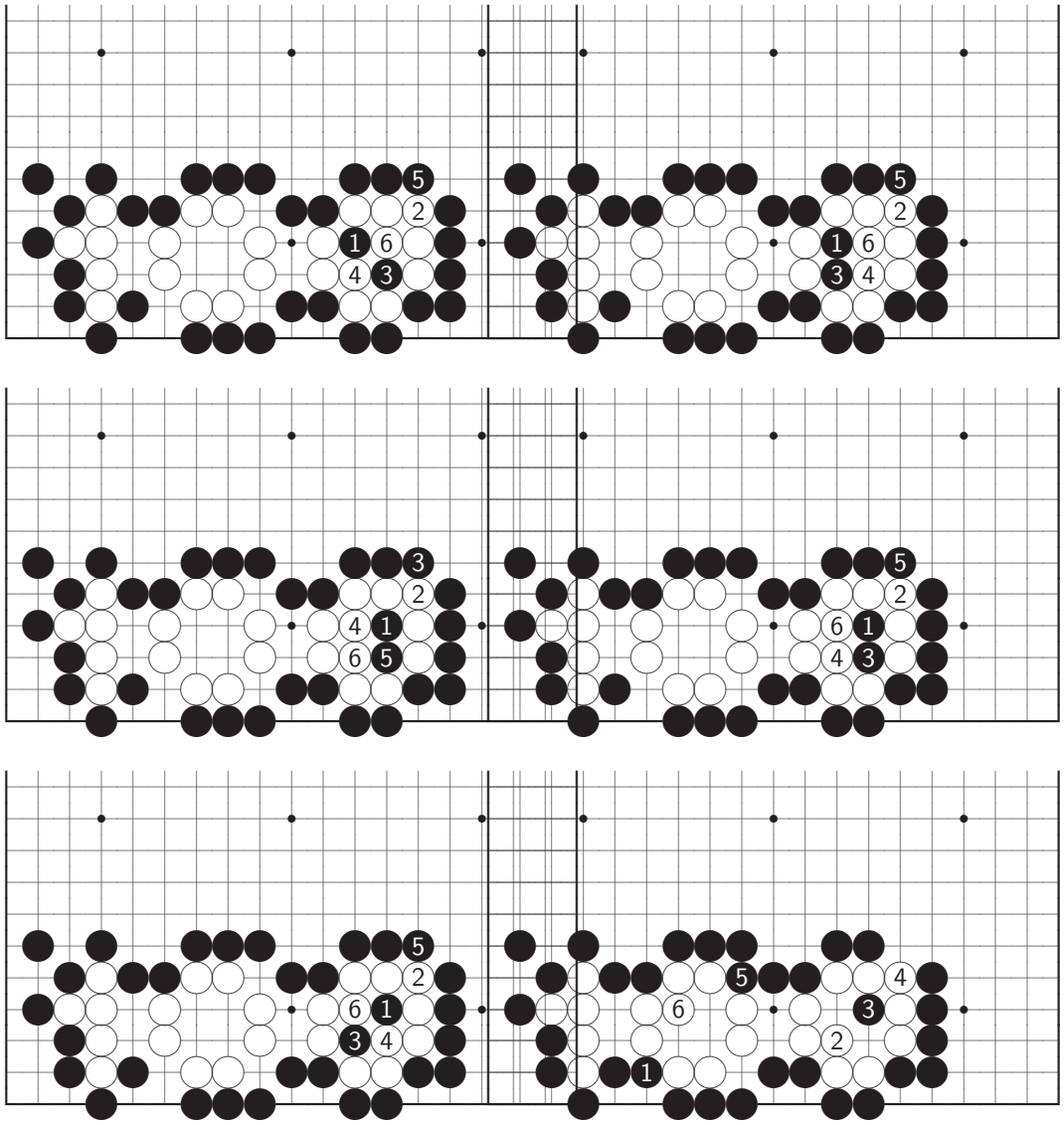

1
2

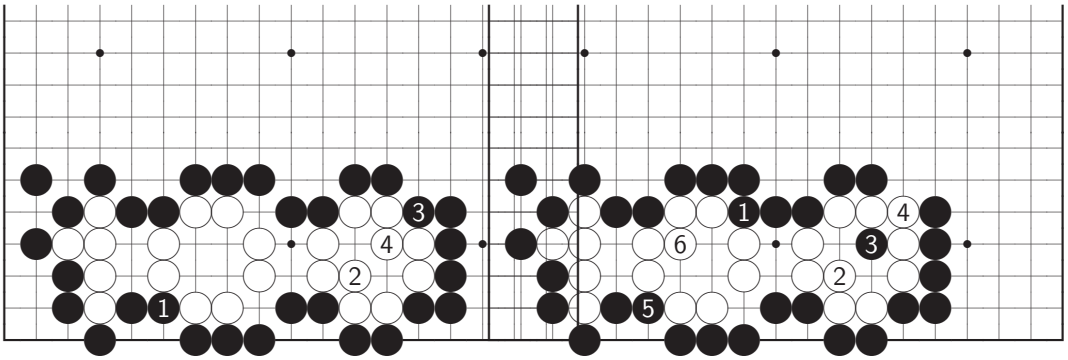

1
2

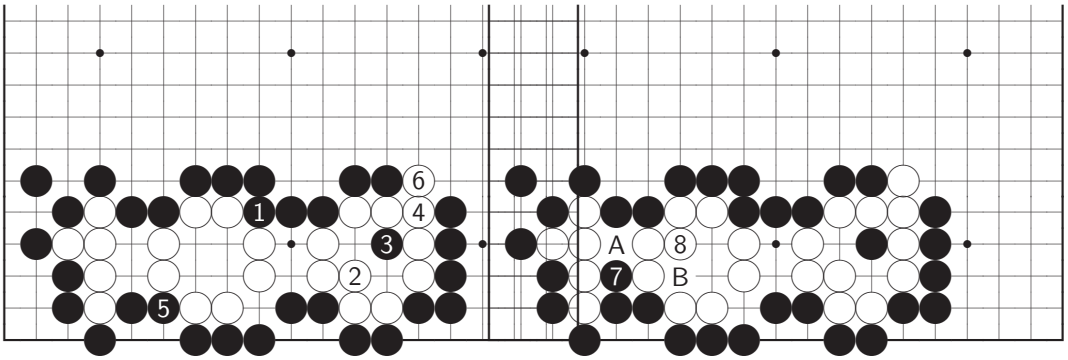

1
2

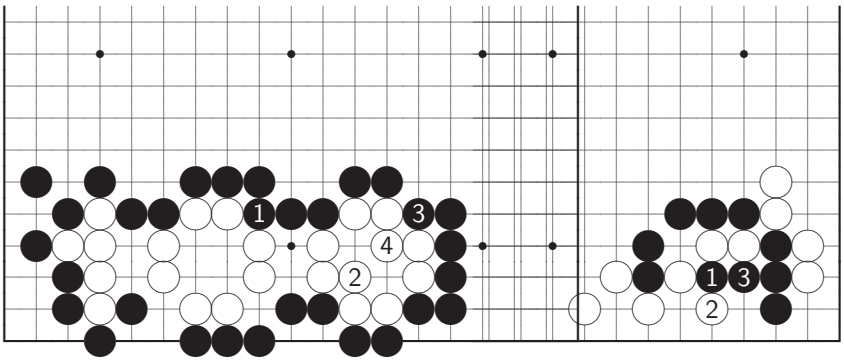

1
4
2
3
5
1
5
2
3
4

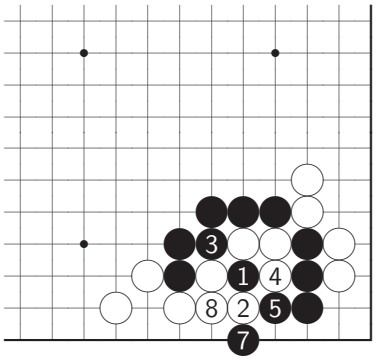

1
2
3
1
3
2
4
3
2
1
3
4
2
1
3
4
1
2
3
2
1
4

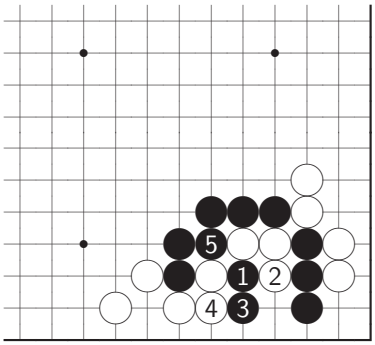

5
2
1 6
4 3
5
2
1 6
3 4
3
2
4 1
6 5
5
2
6 1
4 3
5
2
6 1
3 4
5
4
6
3
2
1

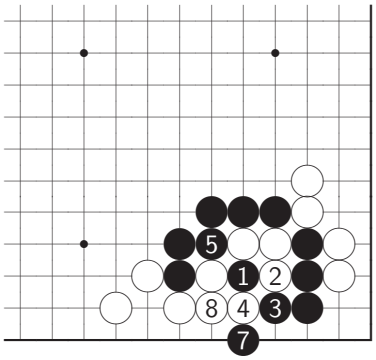

3
4
2
1
1
4
6
3
2
5

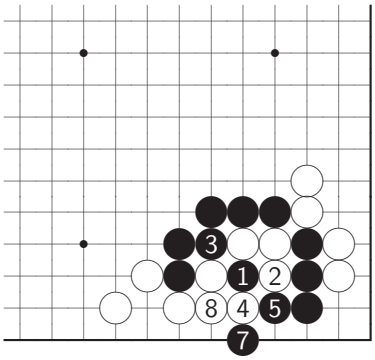

6
1
4
3
2
5
A
8
7
B

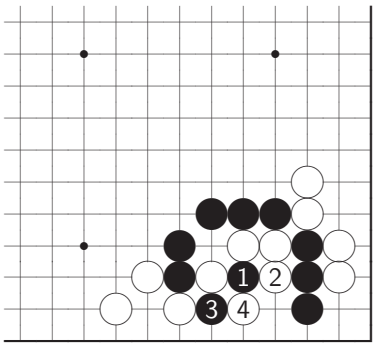

1
3
4
2
1
3
2

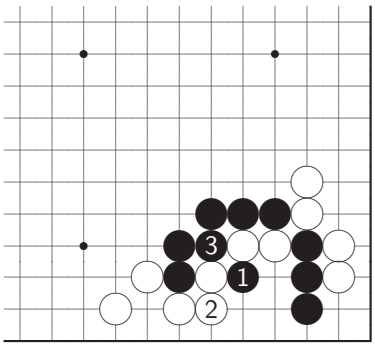

3
1 4
8 2 5
7

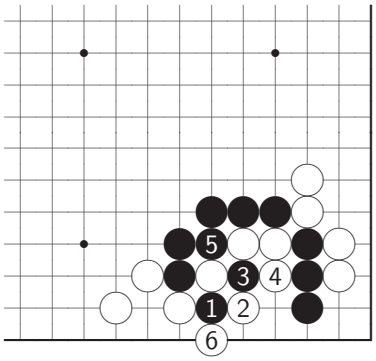

5
1 2
4 3

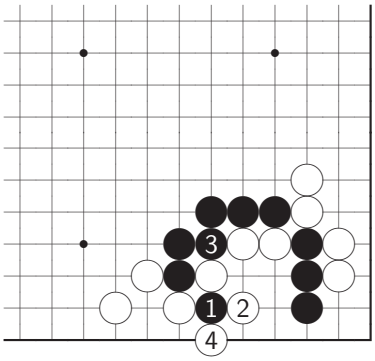

5
1 2
8 4 3
7

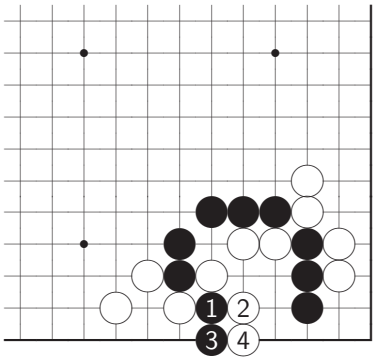

3
1 2
8 4 5
7

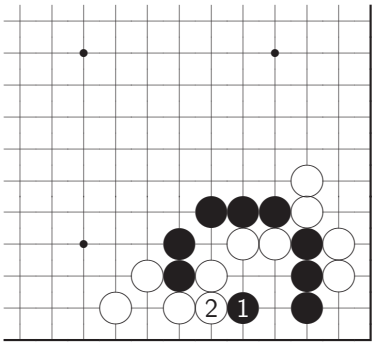

1 2
3 4

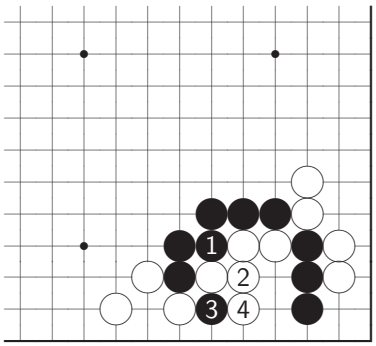

3
1
2

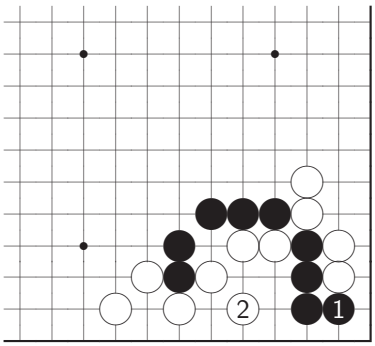

5
3
4
1
2
6

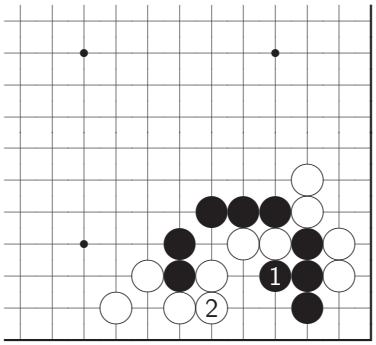

3
1
2
4

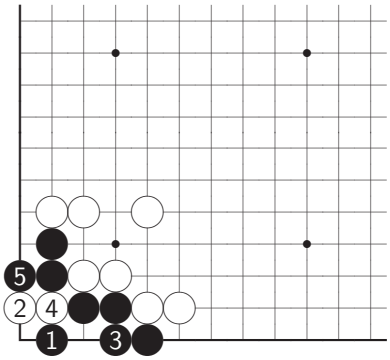

1
2
3
4

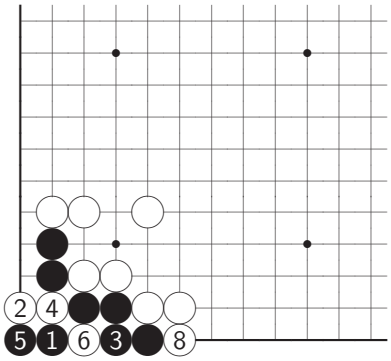

2
1

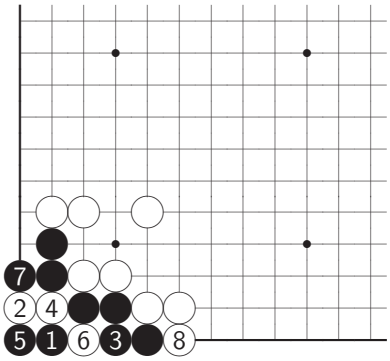

1
2
3
4

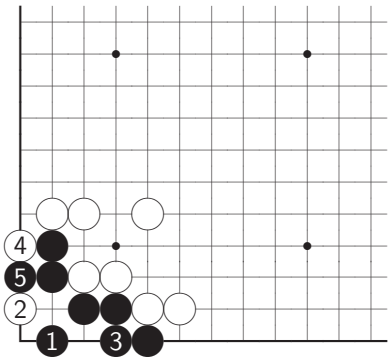

2
1

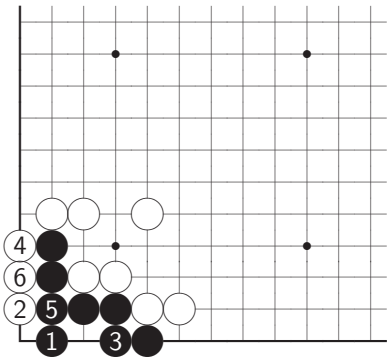

1
2

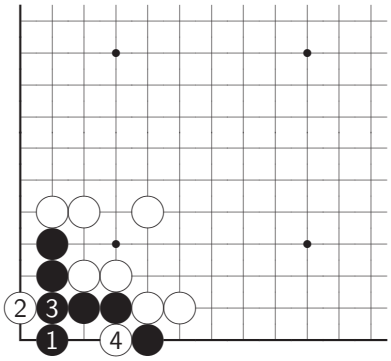

5
2 4
1 3

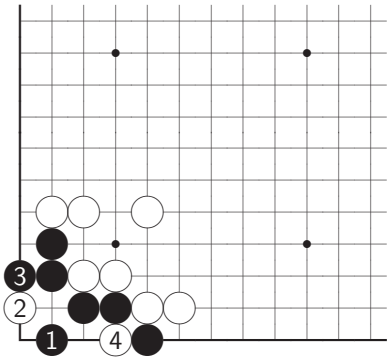

2 4
5 1 6 3 8

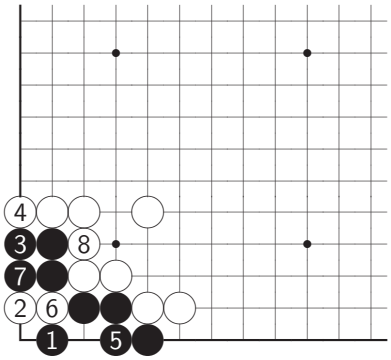

7
2 4
5 1 6 3 8

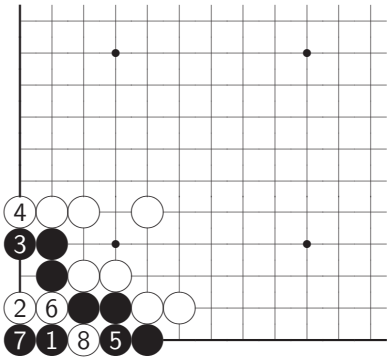

4
5
2
1 3

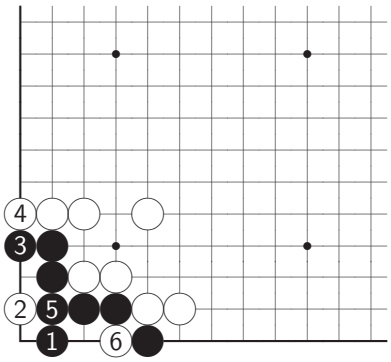

4
6
2 5
1 3

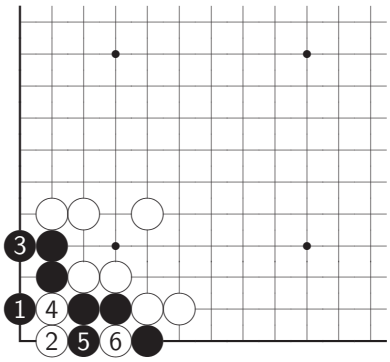

2 3
1 4

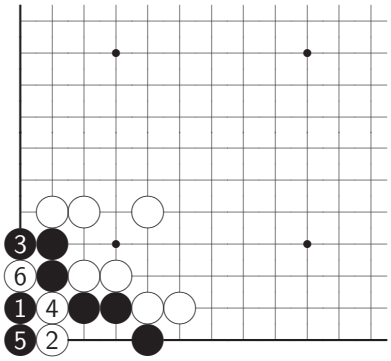

3
2
1 4

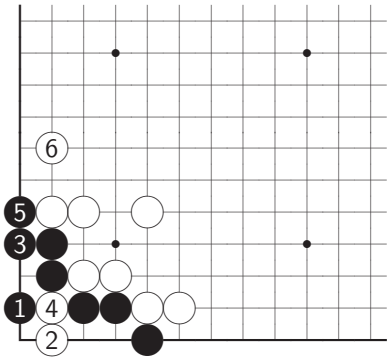

4
3 8
7
2 6
1 5

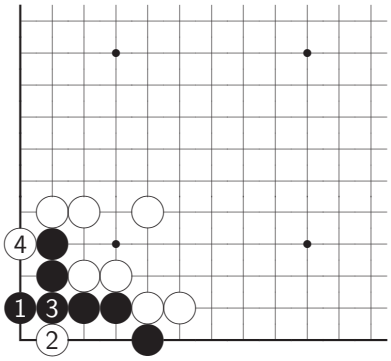

4
3
2 6
7 1 8 5

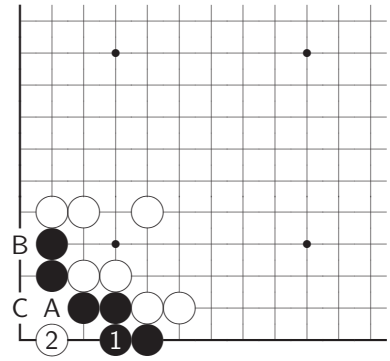

4
3
2 5
1 6

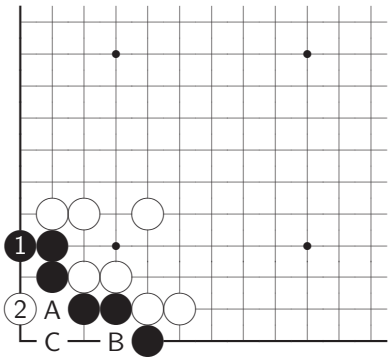

3
1 4
2 5 6

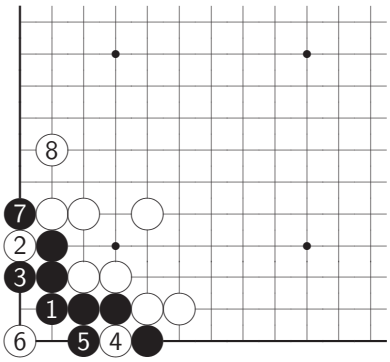

3
6
1 4
5 2

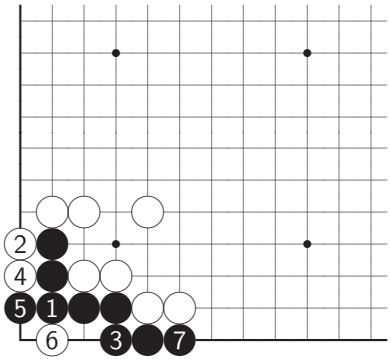

6
5
3
1 4
2

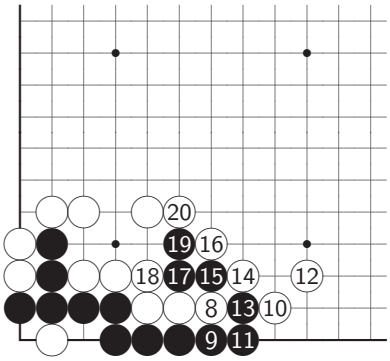

4
1 3
2

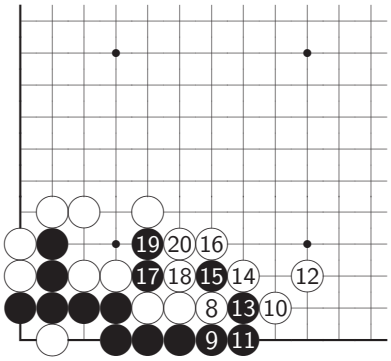

B
C A
2 1

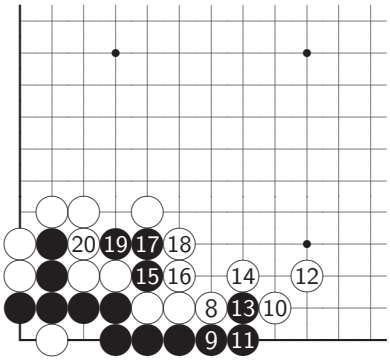

1
2 A
C B

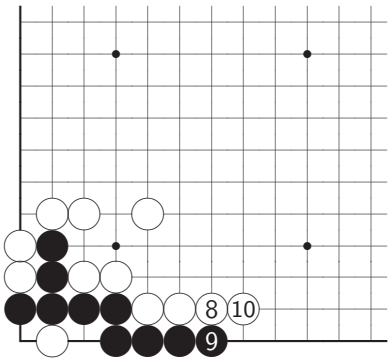

8
7
2
3
1
6 5 4

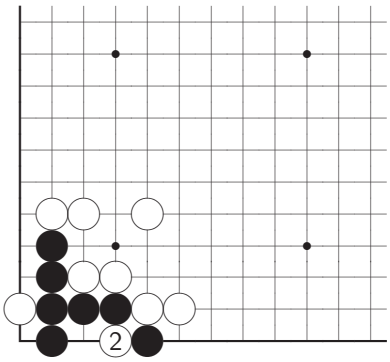

2
4
5 1
6 3 7

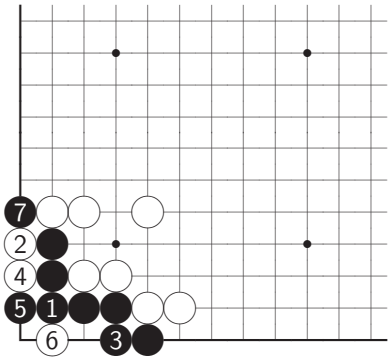

20
19 16
18 17 15 14 12
8 13 10
9 11

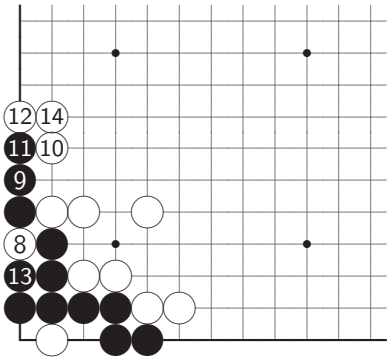

19 20 16
17 18 15 14 12
8 13 10
9 11

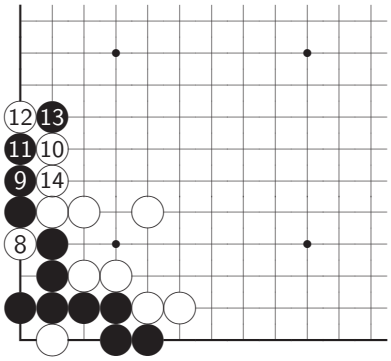

20 19 17 18
15 16 14 12
8 13 10
9 11

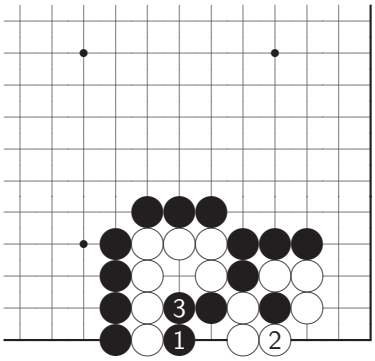

8 10
9

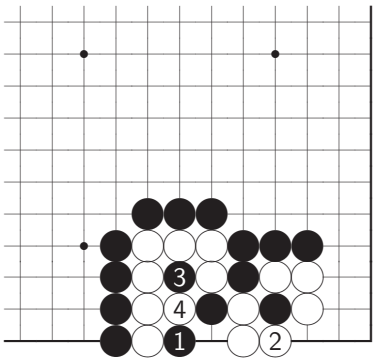

2

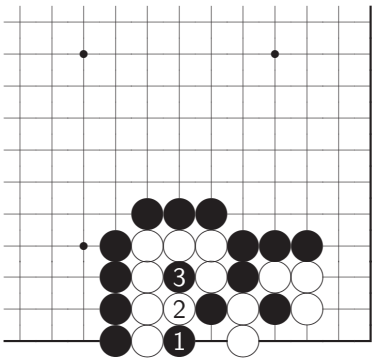

7
2
4
5 1
6 3

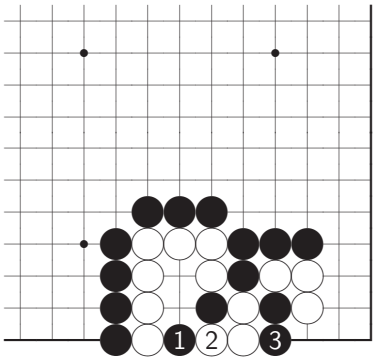

12 14
11 10
9
8
13

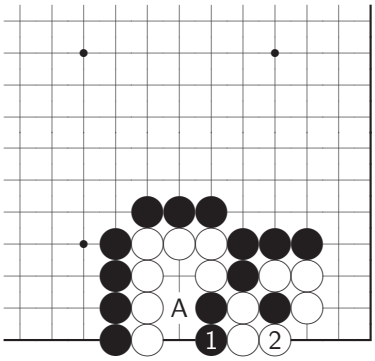

12 13
11 10
9 14
8

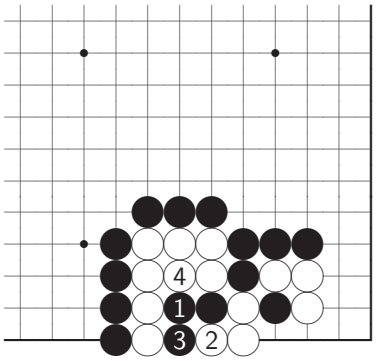

3
1 2

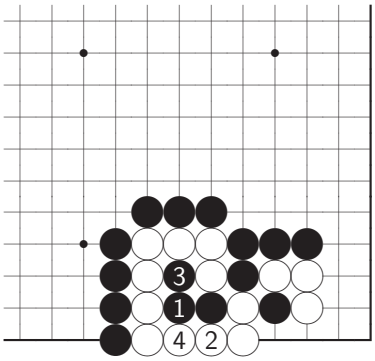

3
4
1 2

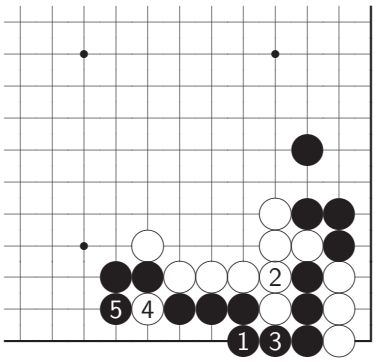

3
2
1

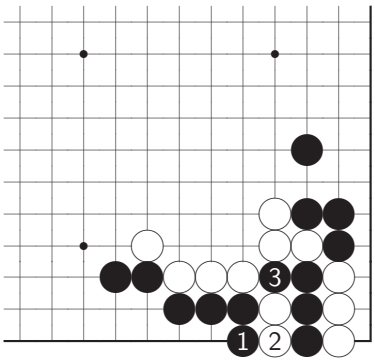

1
2
3

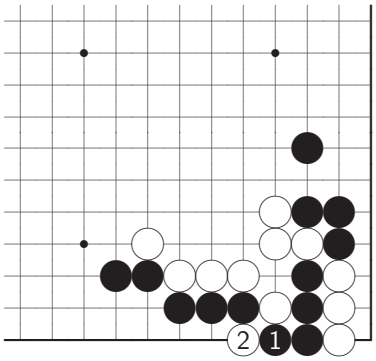

A
1
2

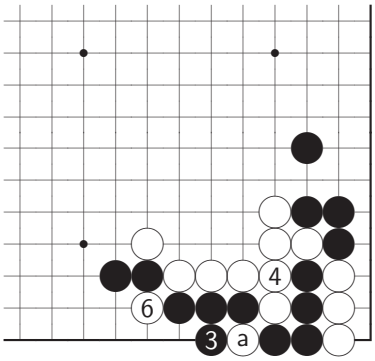

4
1
3
2

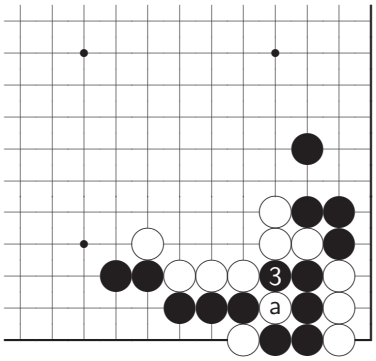

3
1
4
2

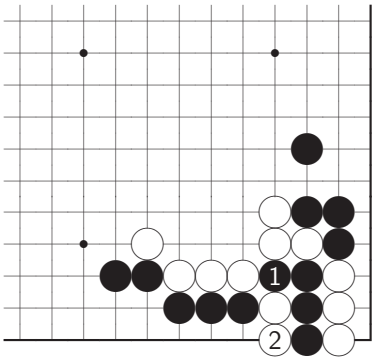

2
5
4
1
3

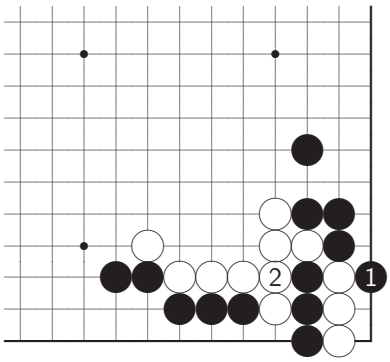

3
1
2

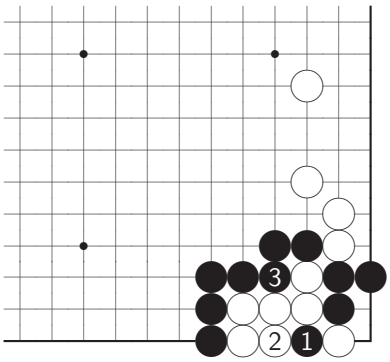

2
1

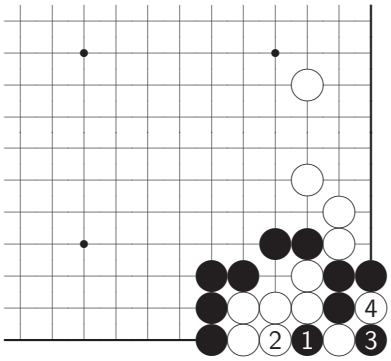

4
6
3
a

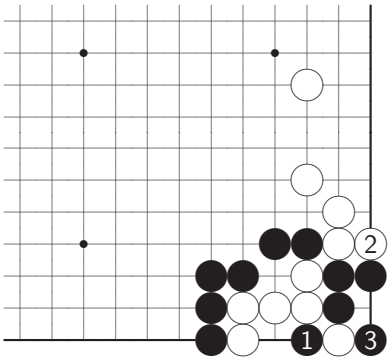

3
a

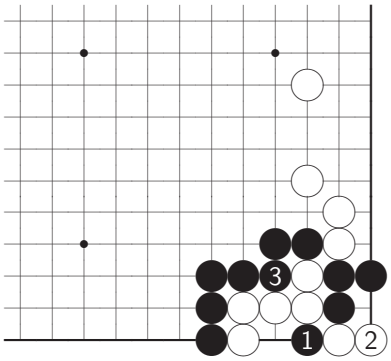

1
2

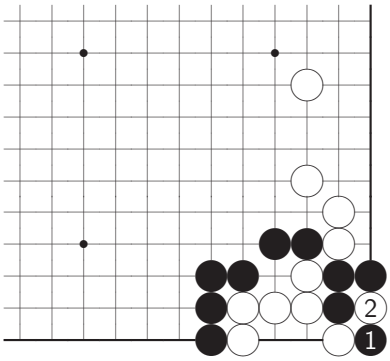

2
1

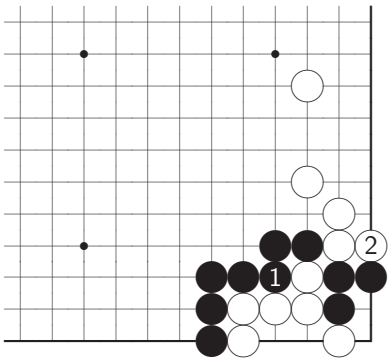

3
2
1

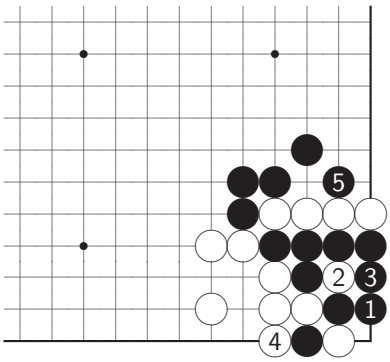

4
2
1
3

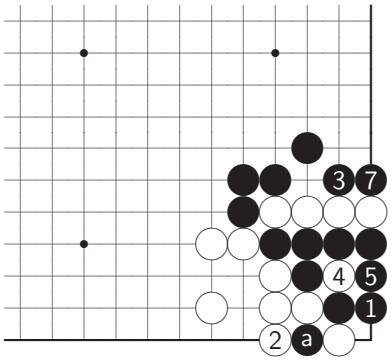

2
1
3

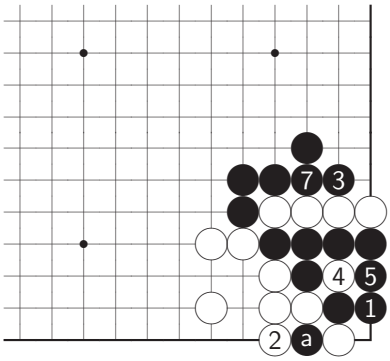

3
1
2

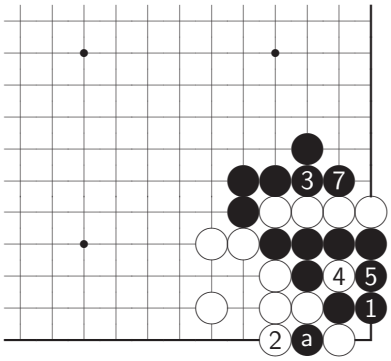

2
1

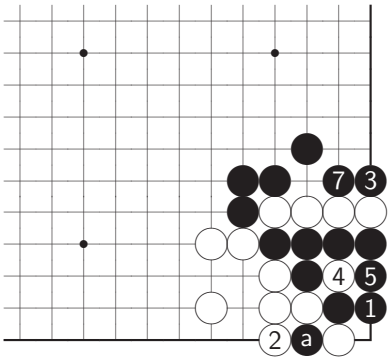

2
1

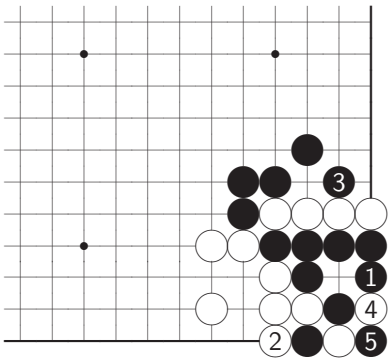

5
2
3
1
4

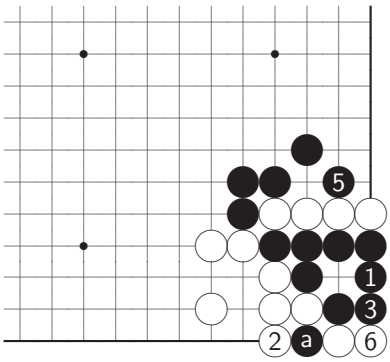

3 7
4 5
1
2 a

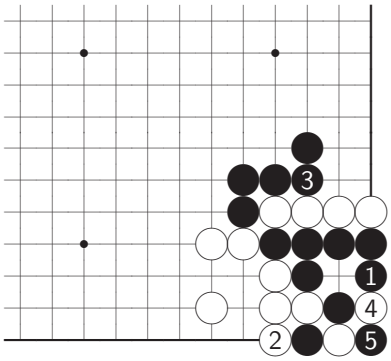

7 3
4 5
1
2 a

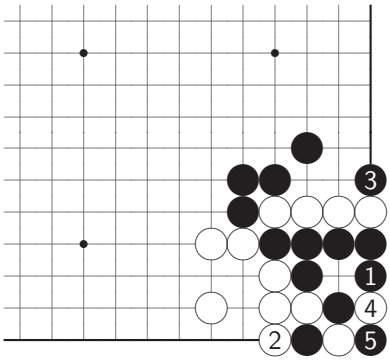

3 7
4 5
1
2 a

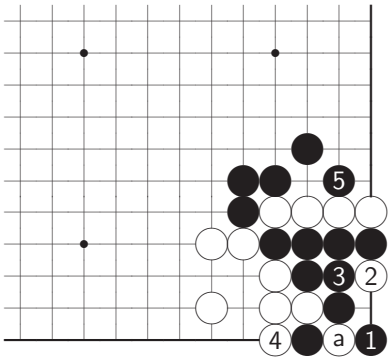

7 3
4 5
1
2 a

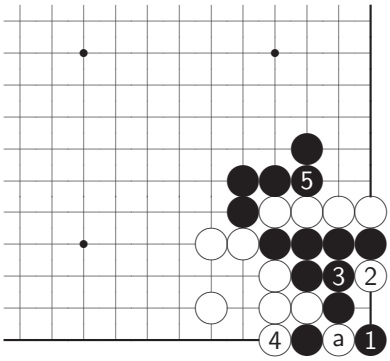

3
1
4
2 5

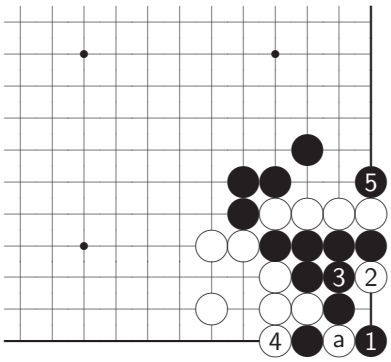

5
1
3
2 a 6

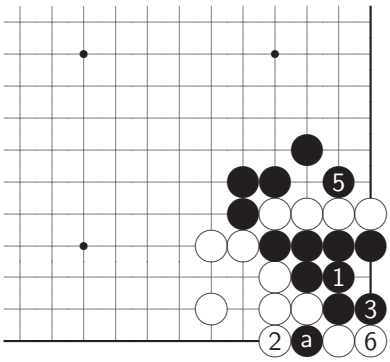

3
1
4
2
5

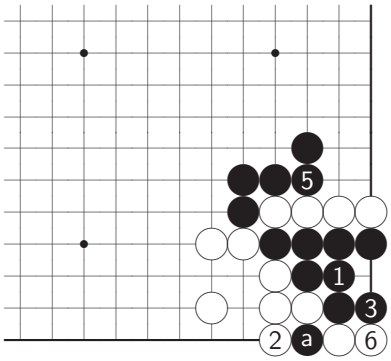

3
1
4
2
5

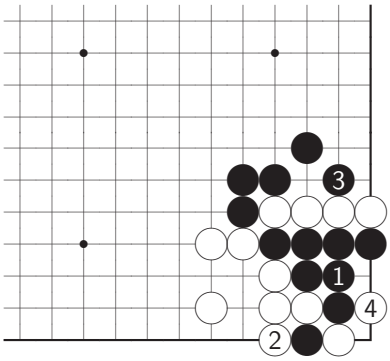

5
3
2
4
a
1

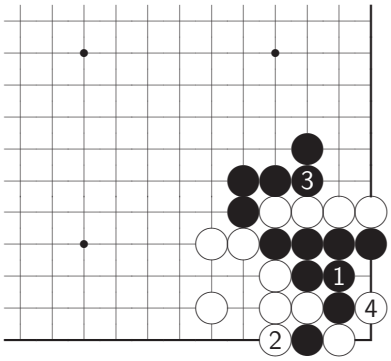

5
3
2
4
a
1

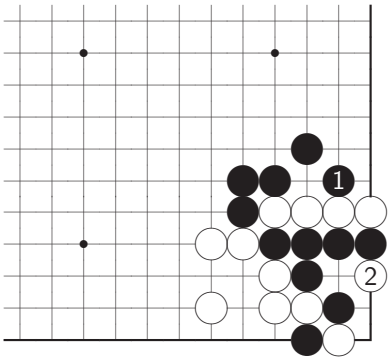

5
3
2
4
a
1

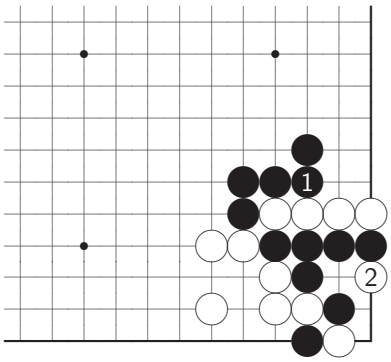

5
1
3
2
a
6

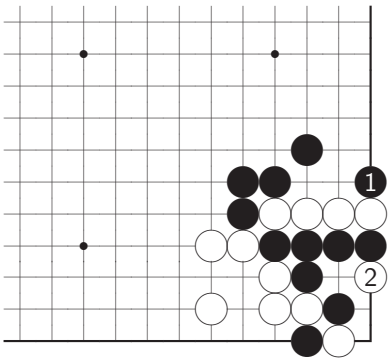

5
1
3
2
a
6

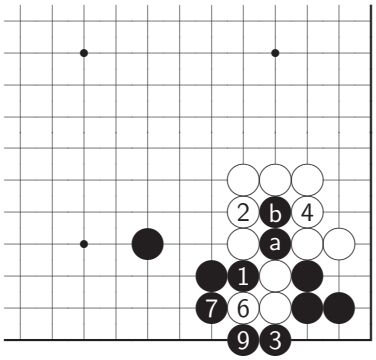

3
1
4
2

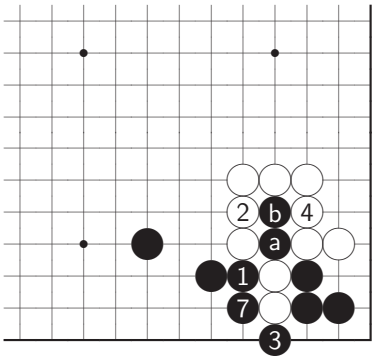

3
1
4
2

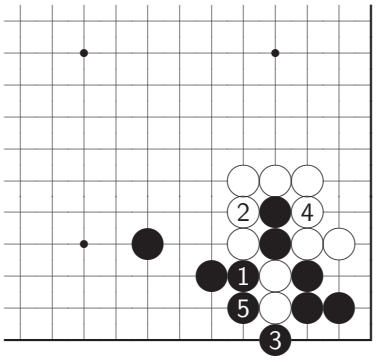

1
2

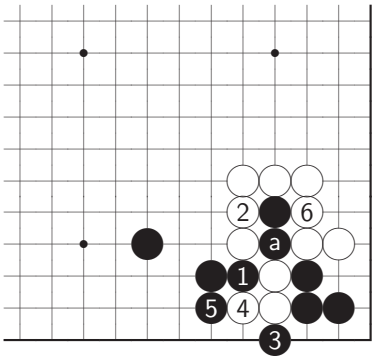

1
2

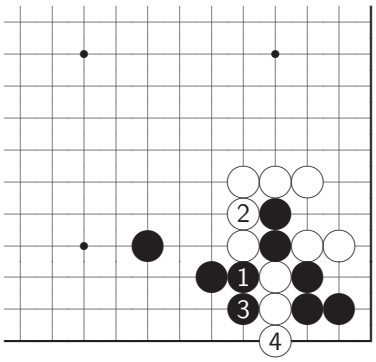

1
2

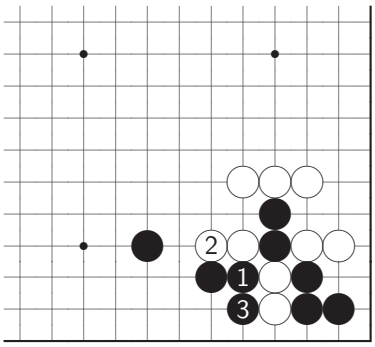

2 b 4
a
1
7 6
9 3

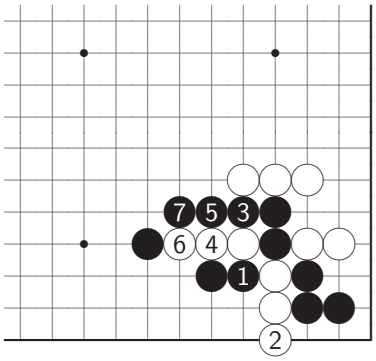

2 b 4
a
1
7
3

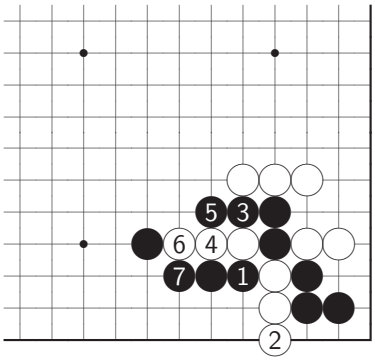

2 4
1
5
3

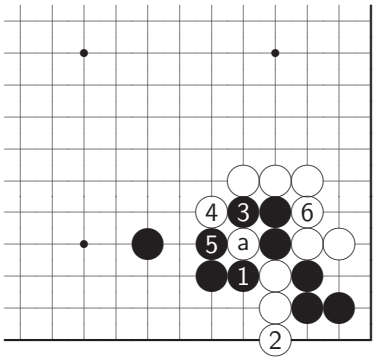

2 6
a
1
5 4
3

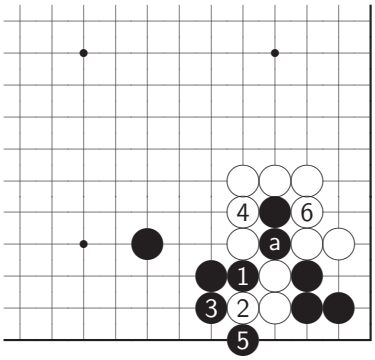

2
1
3
4

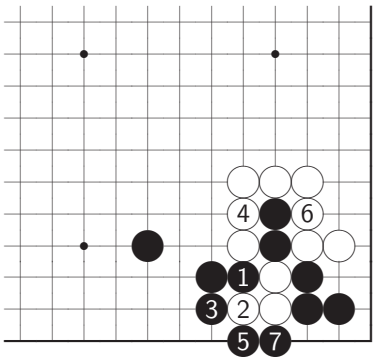

2
1
3

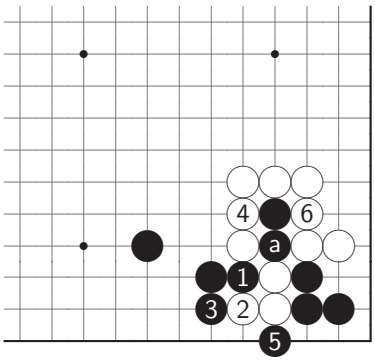

7 5 3
6 4
1
2

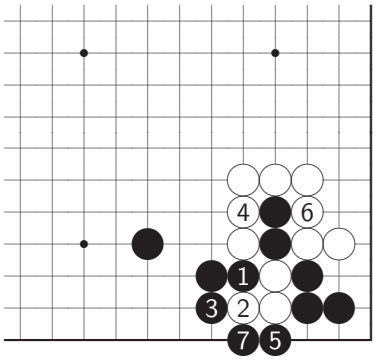

5 3
6 4
7 1
2

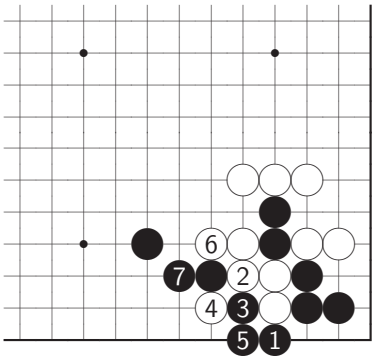

4 3 6
5 a
1
2

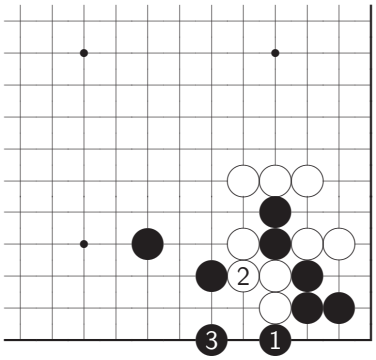

4 6
a
1
3 2
5

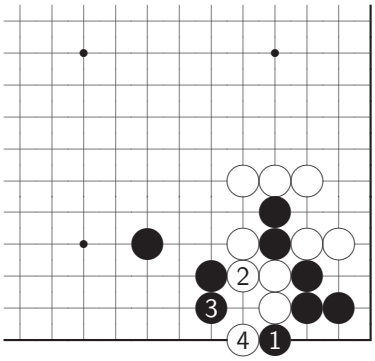

4 6
1
3 2
5 7

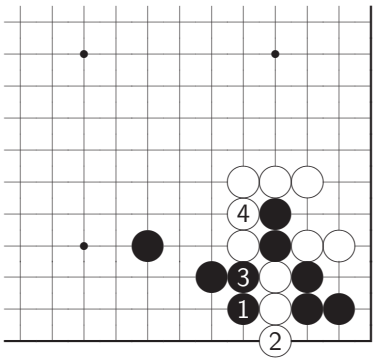

4 6
a
1
3 2
5

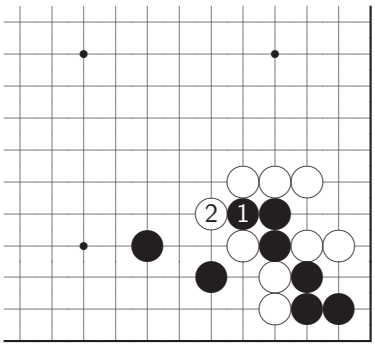

4 6
1
3 2
7 5

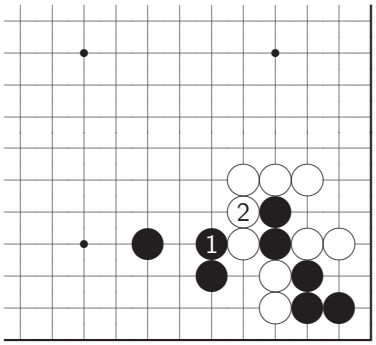

6
7 2
4 3
5 1

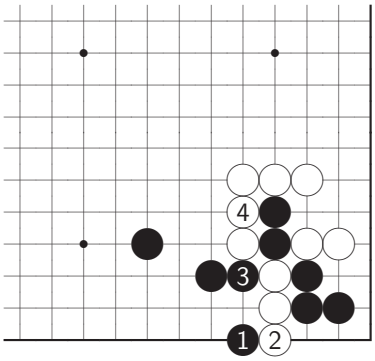

2
3 1

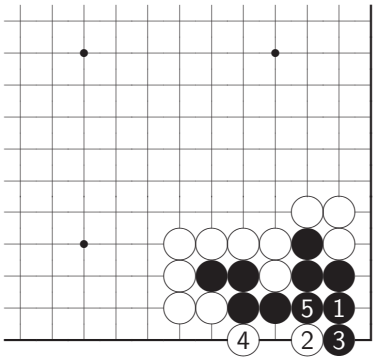

2
3
4 1

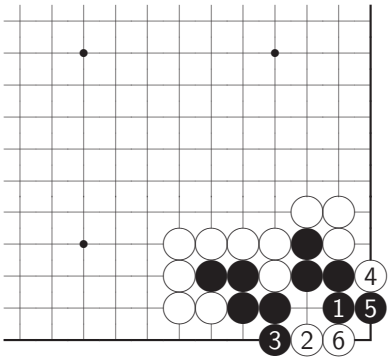

4
3
1
2

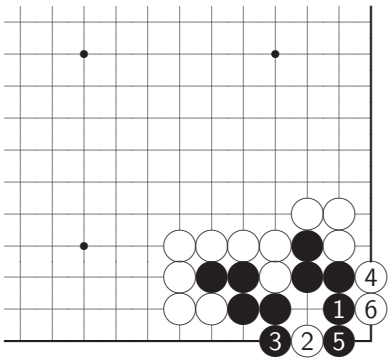

2 1

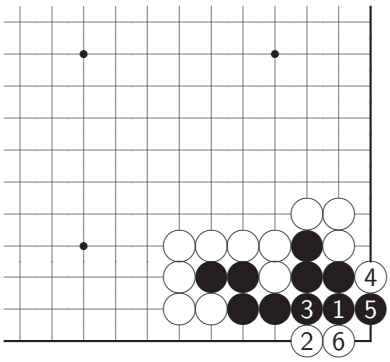

2
1

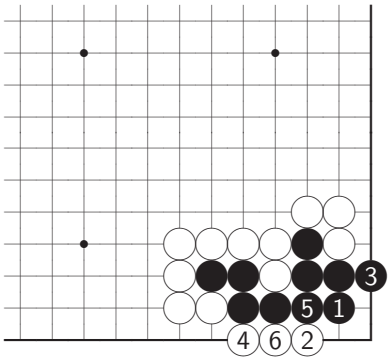

4
3
1 2

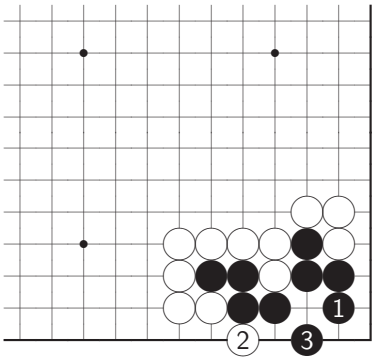

5 1
4 2 3

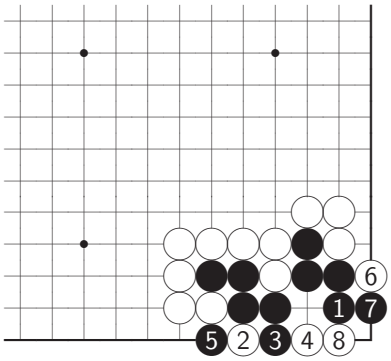

4
1 5
3 2 6

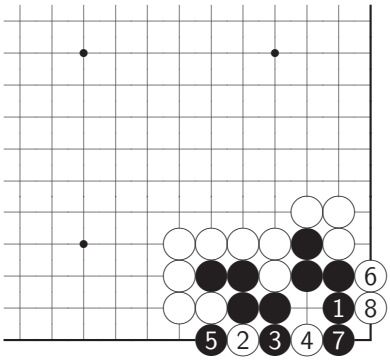

4
1 6
3 2 5

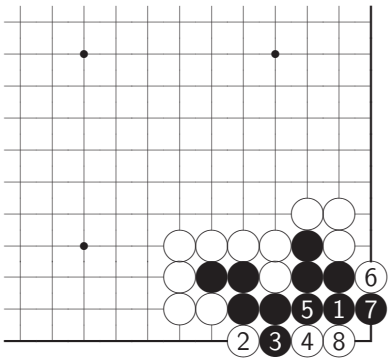

4
3 1 5
2 6

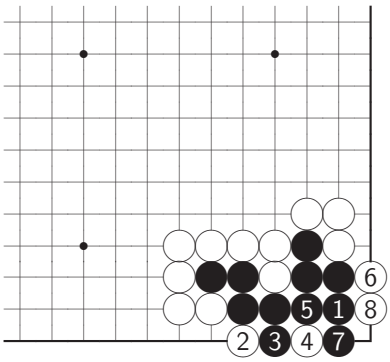

3
5 1
4 6 2

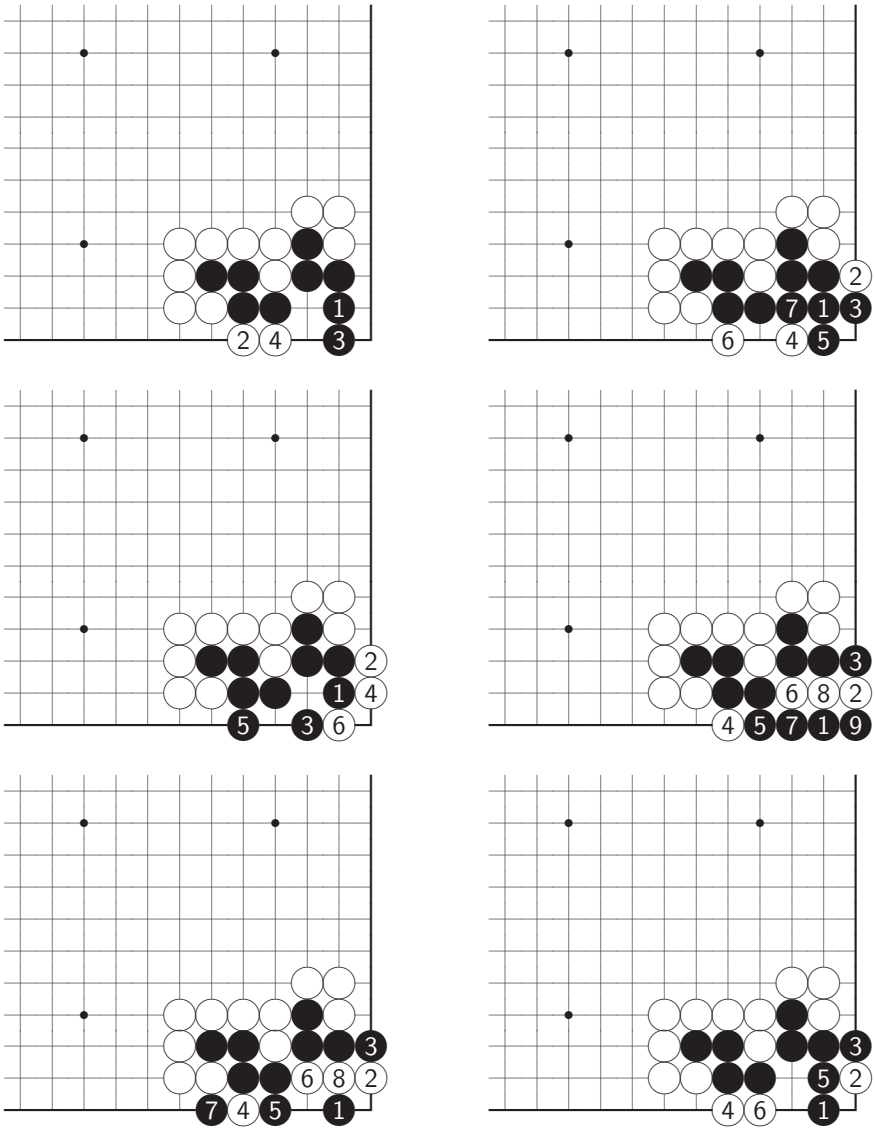

1
2 3

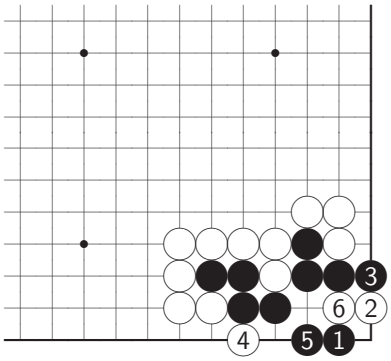

6
1 7
5 2 3 4 8

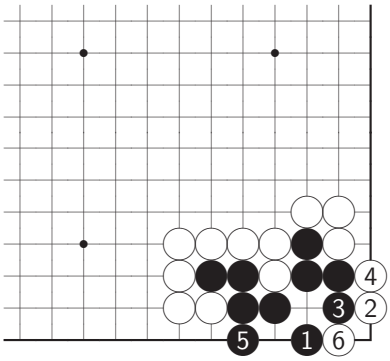

6
1 8
5 2 3 4 7

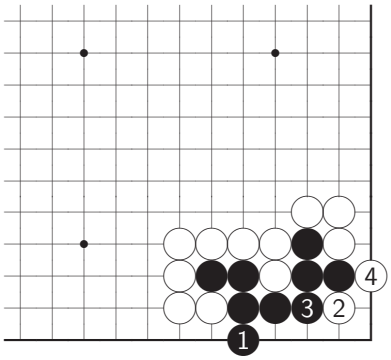

6
5 1 7
2 3 4 8

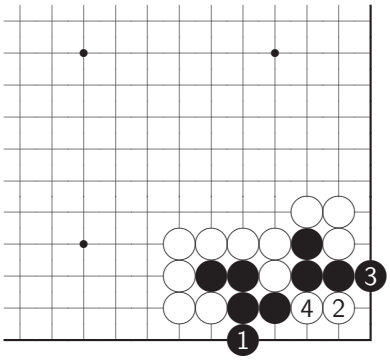

6
5 1 8
2 3 4 7

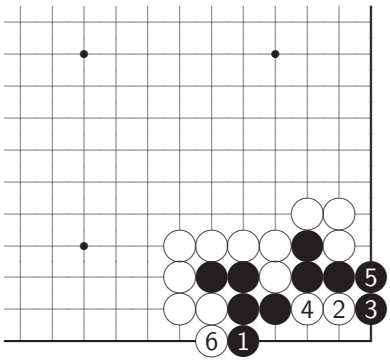

1
2 4 3
2
7 1 3
6 4 5
2
1 4
5 3 6
3
6 8 2
4 5 7 1 9
3
6 8 2
7 4 5 1
3
5 2
4 6 1

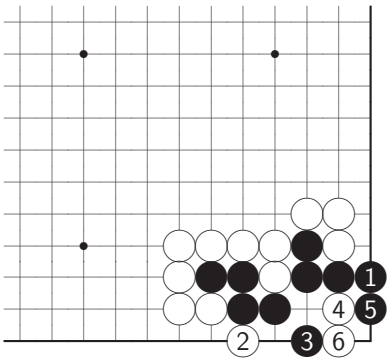

3
6 2
4 5 1

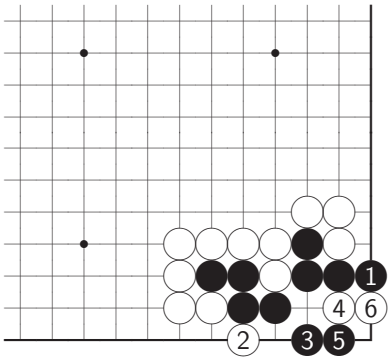

4
3 2
5 1 6

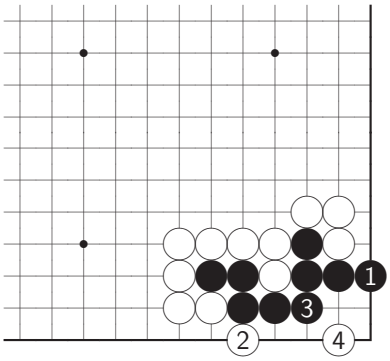

4
3 2
1

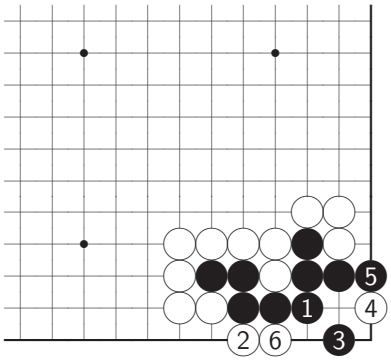

3
4 2
1

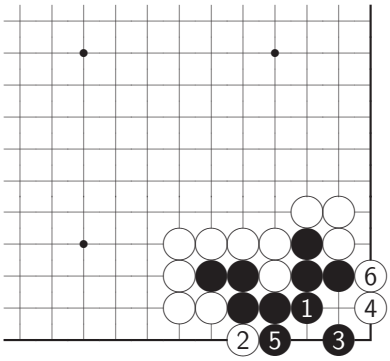

5
4 2 3
6 1

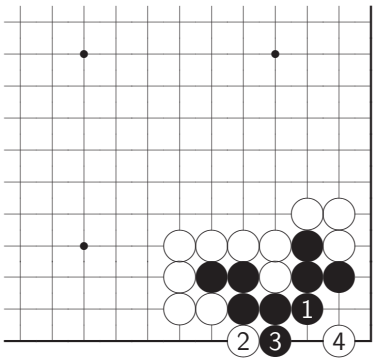

1
4 5
2 3 6

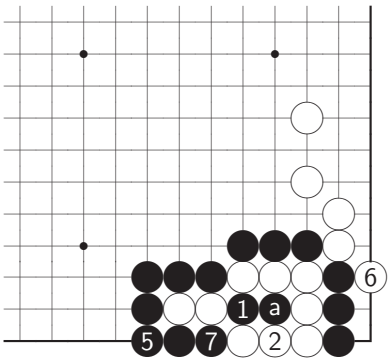

1
4 6
2 3 5

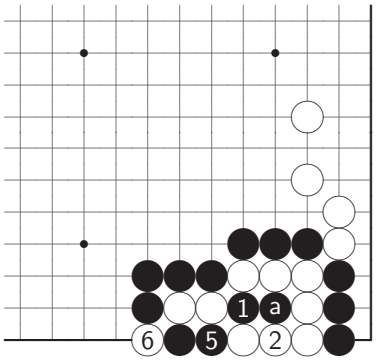

1
3
2 4

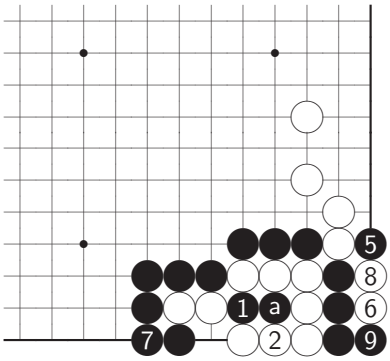

5
1 4
2 6 3

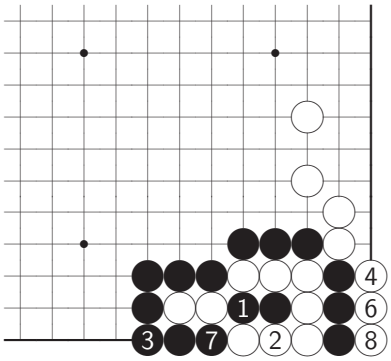

6
1 4
2 5 3

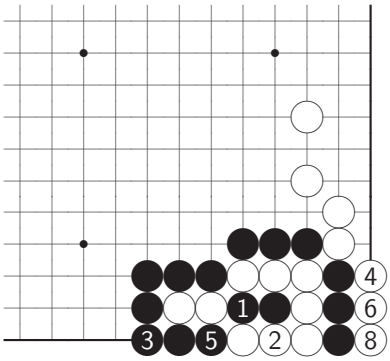

1
2 3 4

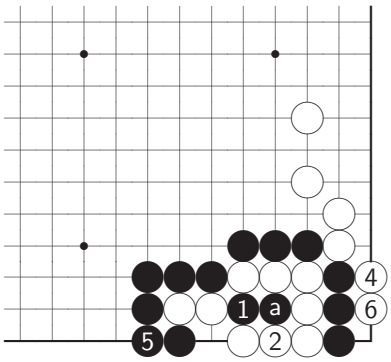

6
1 a
5 7 2

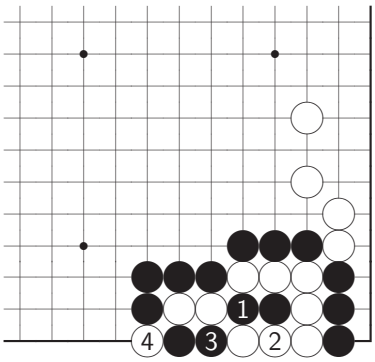

1 a
6 5 2

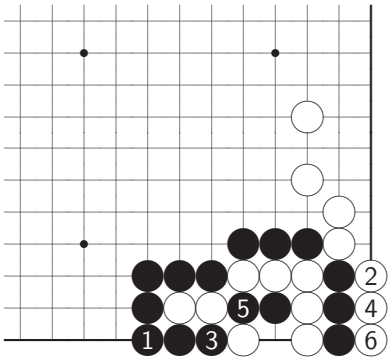

5
8
1 a
6
7 2 9

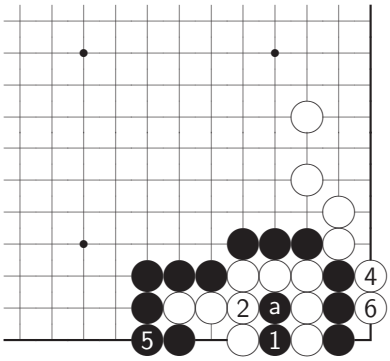

4
1
6
3 7 2 8

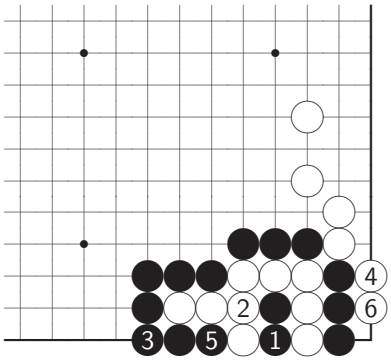

4
1
6
3 5 2 8

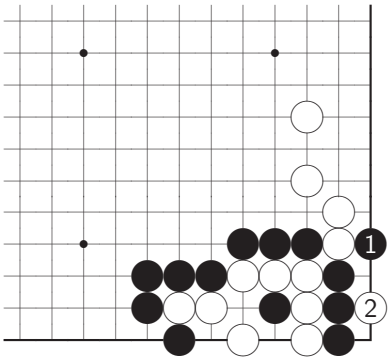

4
1 a
6
5 2

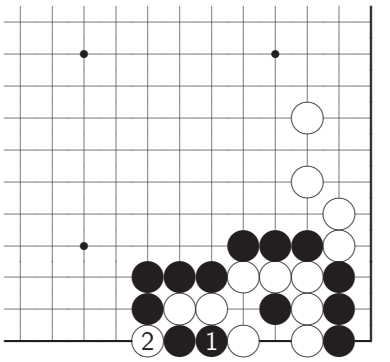

1
4 3 2

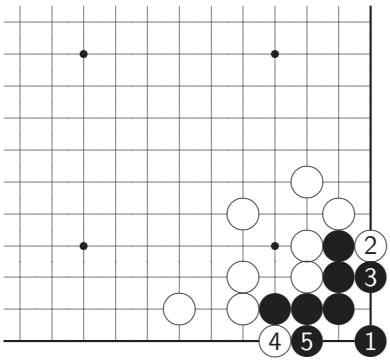

2
4
6
5
1
3

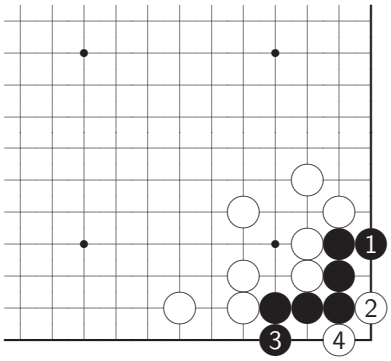

4
6
2
a
5
1

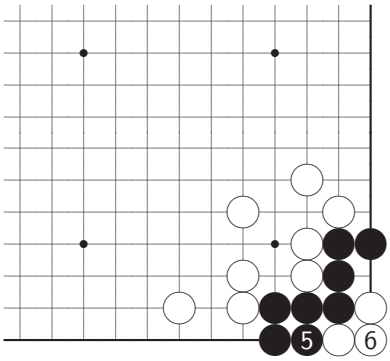

4
6
2
3
5
1

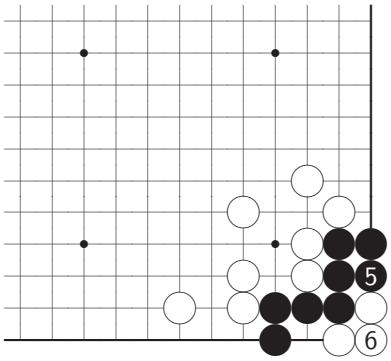

1
2

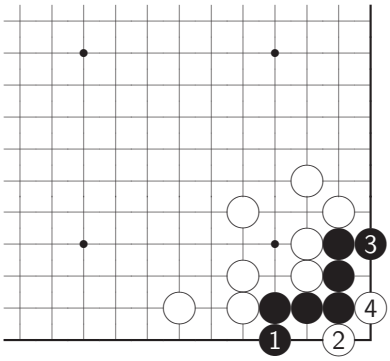

2
1

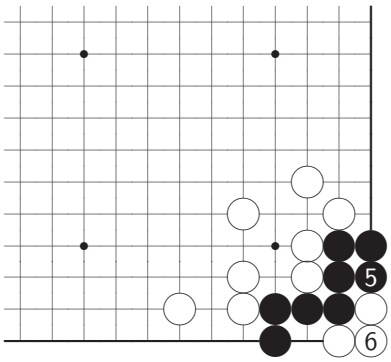

2
3
4
5
1

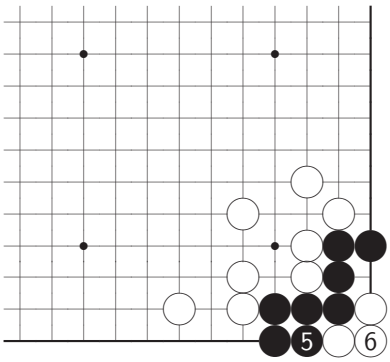

1
2
3
4

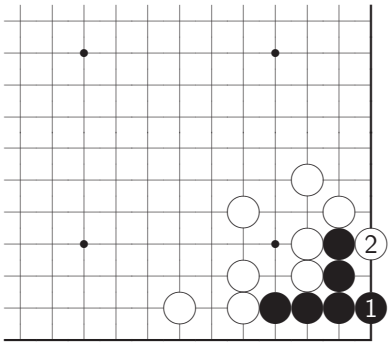

5
6

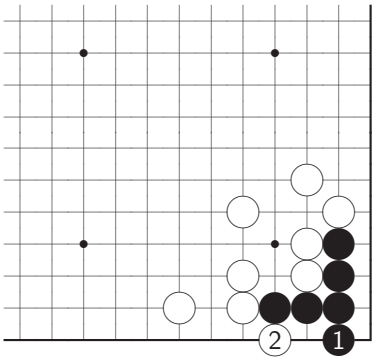

5
6

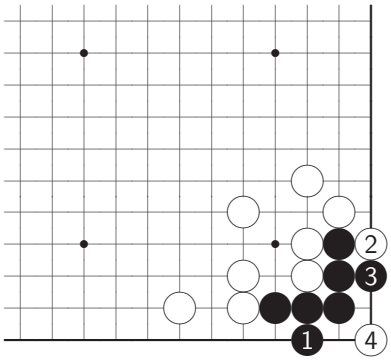

3
4
1
2

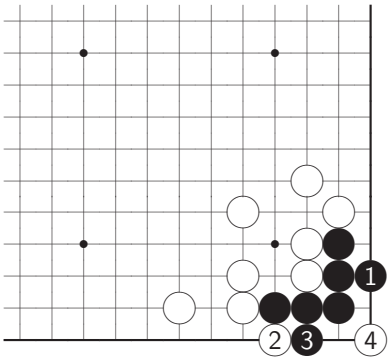

5
6

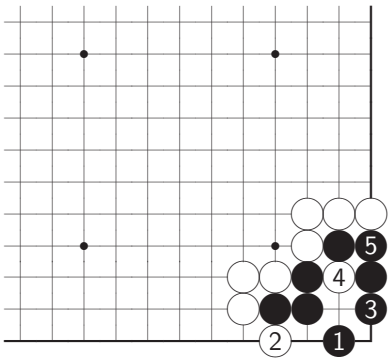

5
6

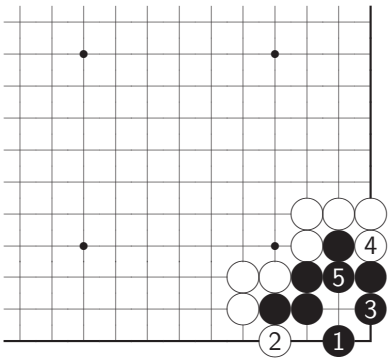

2
1

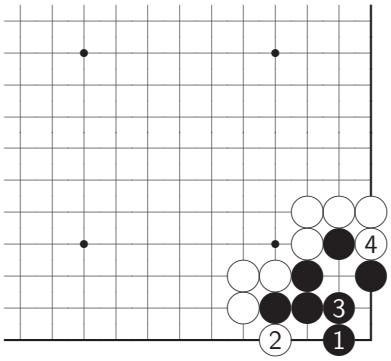

2
1

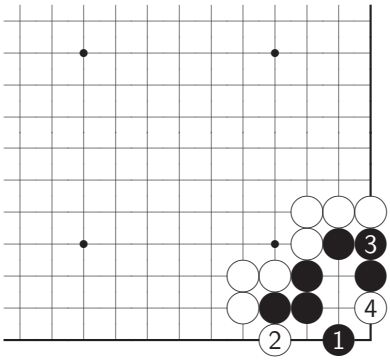

2
3
1
4

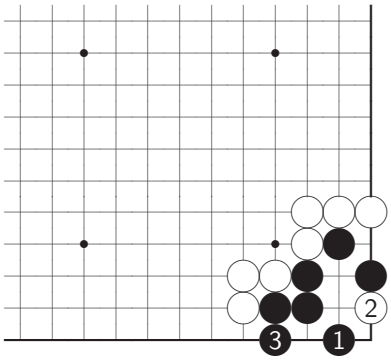

1
2
3
4

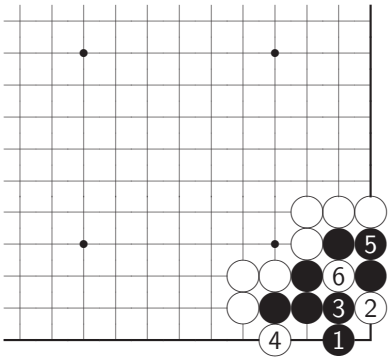

5
4
3
2
1

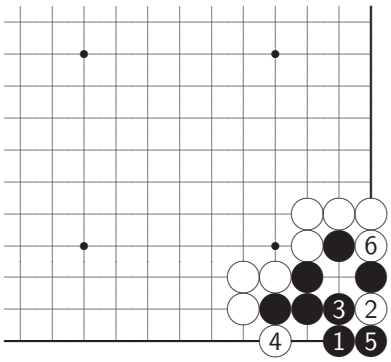

4
5
3
2
1

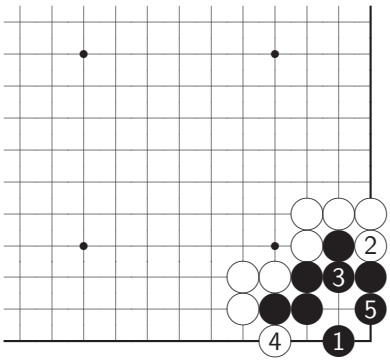

4
3
2
1

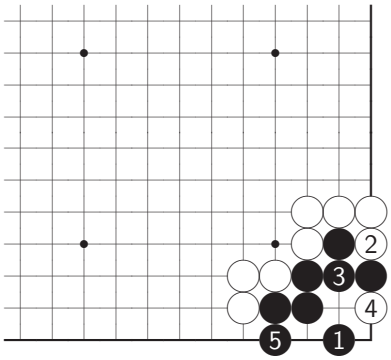

3
4
2
1

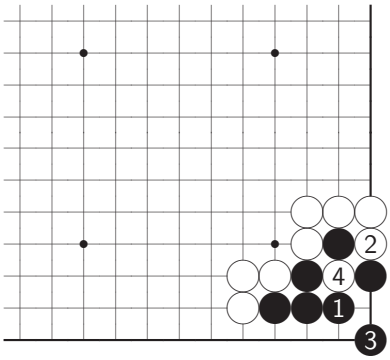

2
3
1

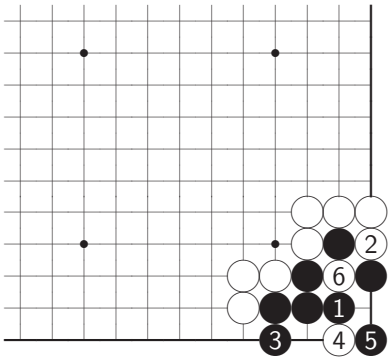

5
6
3
2
4
1

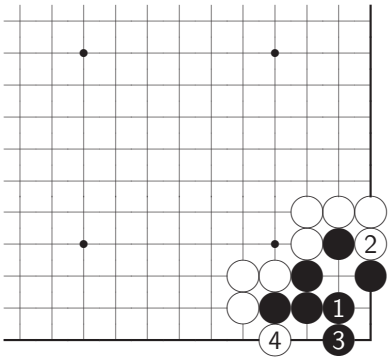

6
3
2
4
1
5

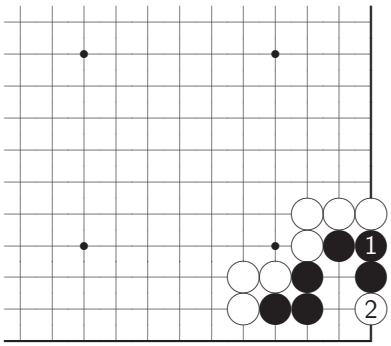

2
3
5
4
1

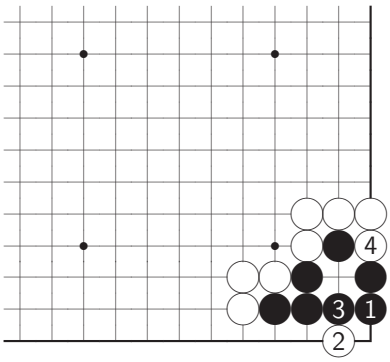

2
3
4
5
1

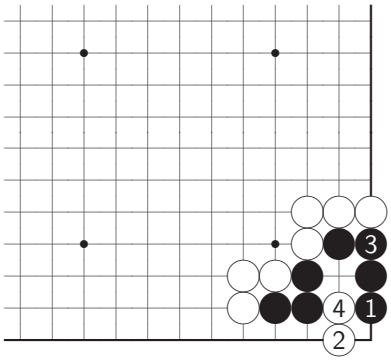

2
4
1
3

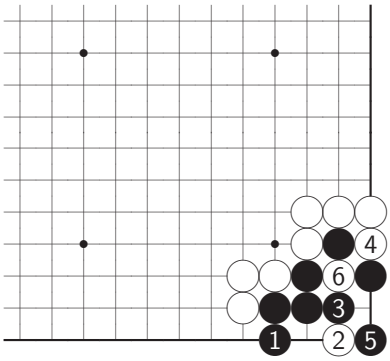

2
6
1
3
4
5

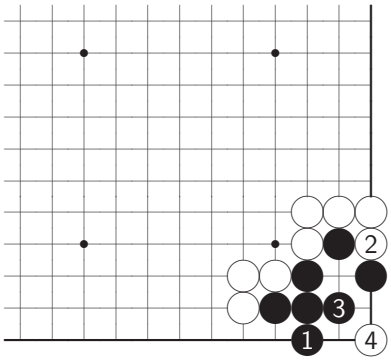

2
1
4
3

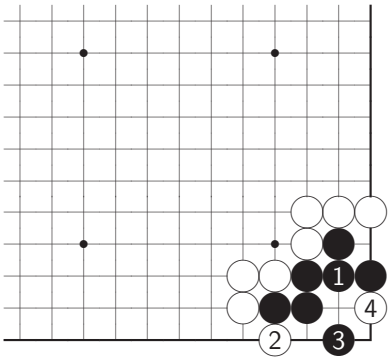

1
2

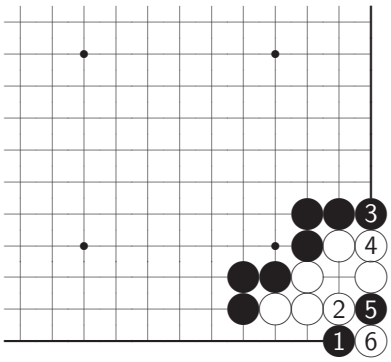

4
3
1
2

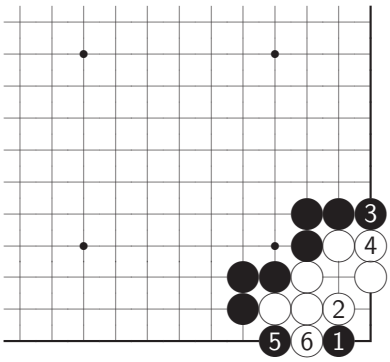

3
4 1
2

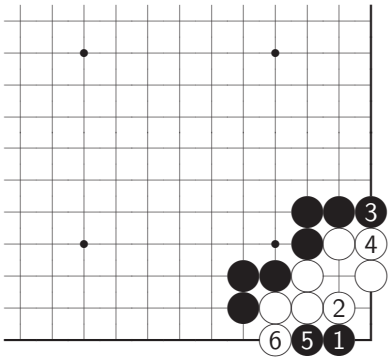

4
6
3
1 2 5

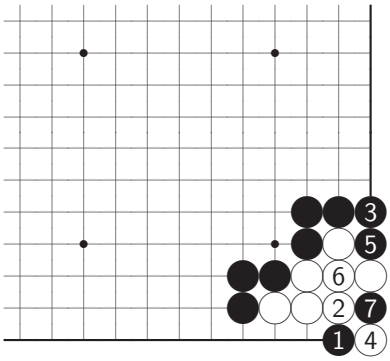

2
3
1 4

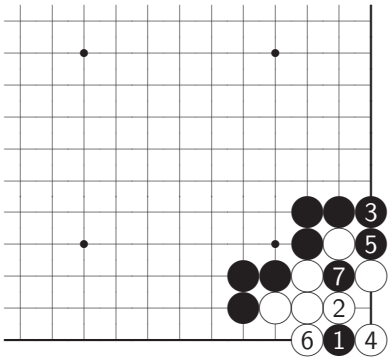

1
4
2 3

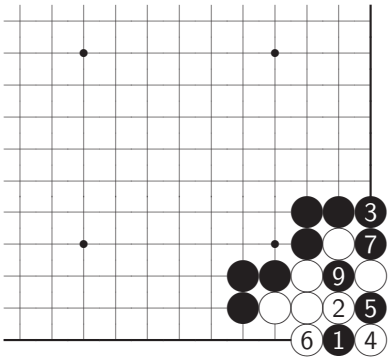

3
4
2 5
1 6

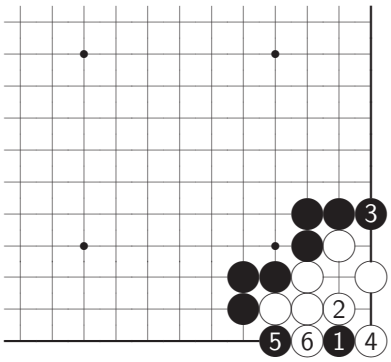

3
4
2
5 6 1

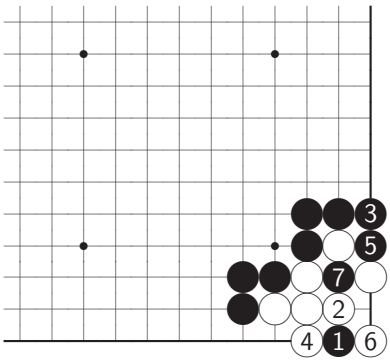

3
4
2
6 5 1

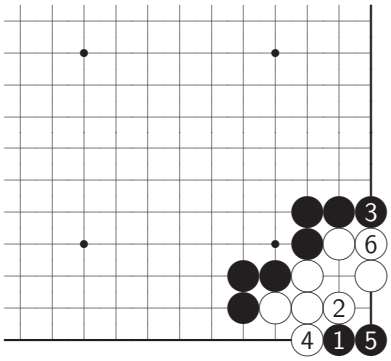

3
5
6
2 7
1 4

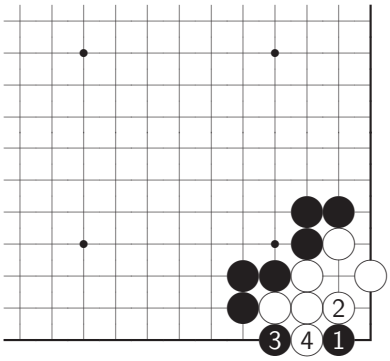

3
5
7
2
6 1 4

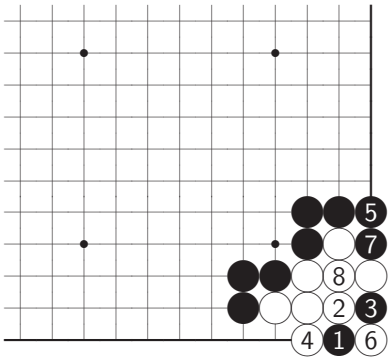

3
7
9
2 5
6 1 4

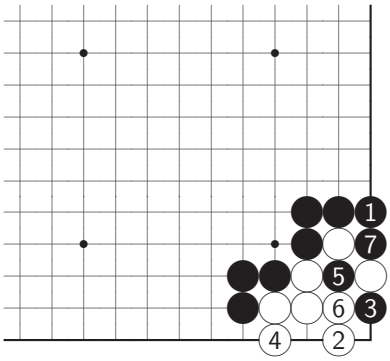

3
2
5 6 1 4

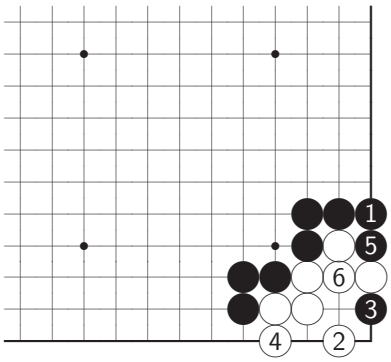

3
5
7
2
4 1 6

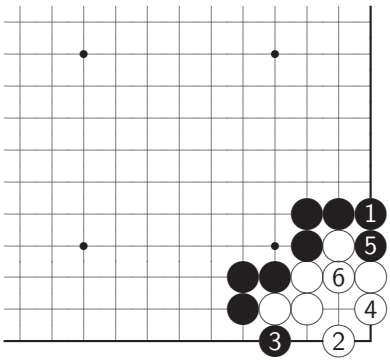

3
6
2
4 1 5

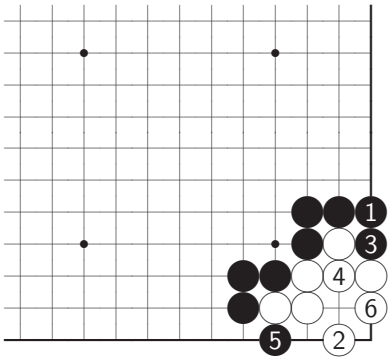

2
3 4 1

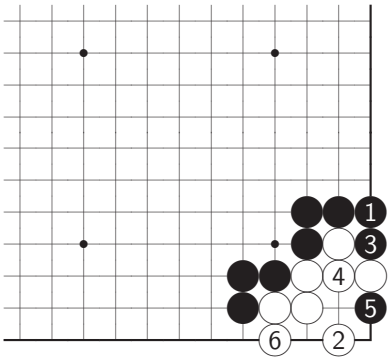

5
7
8
2 3
4 1 6

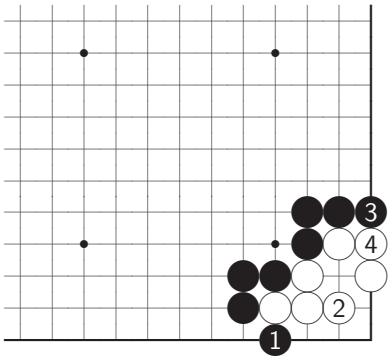

1
7
5
6 3
4 2

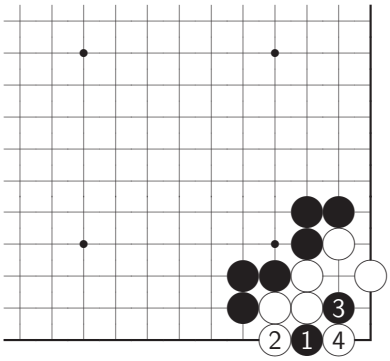

1
5
6
3
4 2

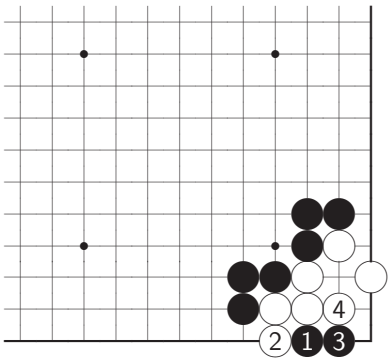

1
5
6
4
3 2

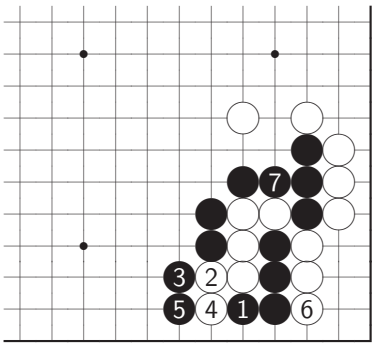

1
3
4
6
5
2

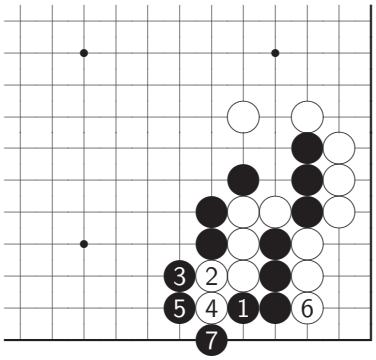

1
3
4
5
6
2

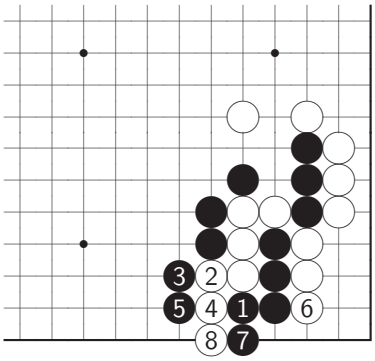

3
4
2
1

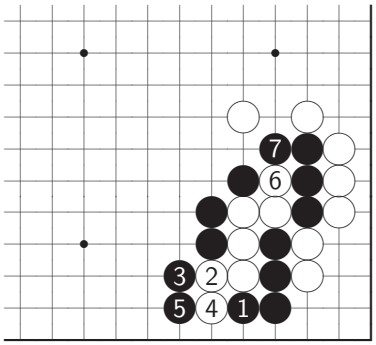

3
2
1
4

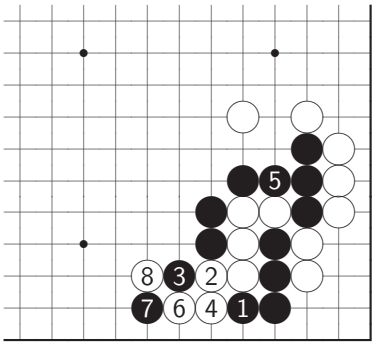

4
2
1
3

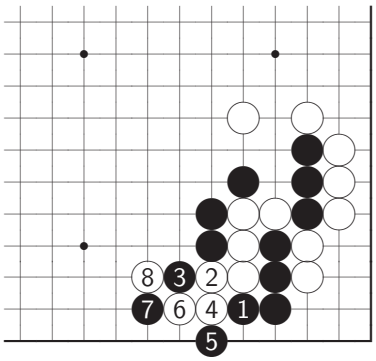

7
3
2
5
4
1
6

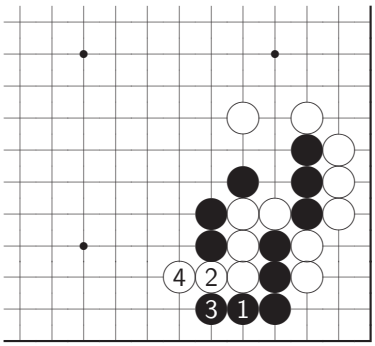

3 2
5 4 1 6
7

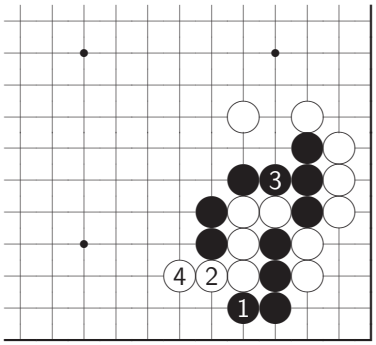

3 2
5 4 1 6
8 7

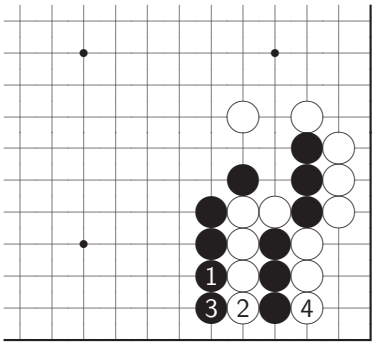

7
6
3 2
5 4 1

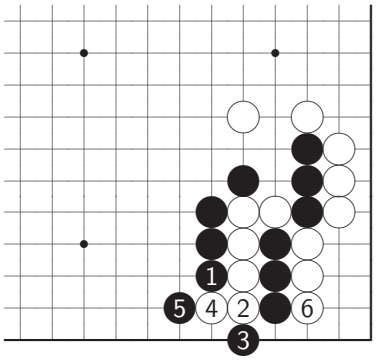

5
8 3 2
7 6 4 1

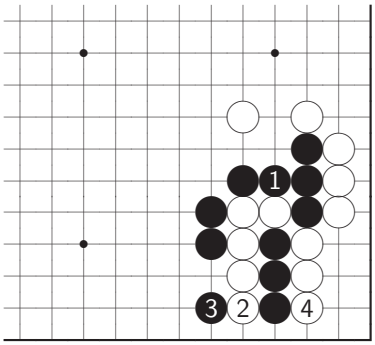

8 3 2
7 6 4 1
5

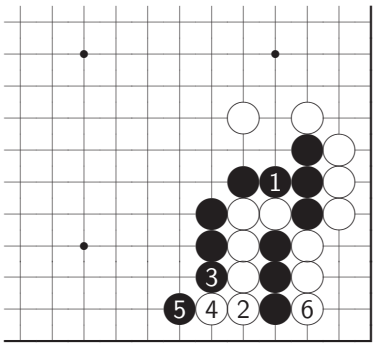

4 2
3 1

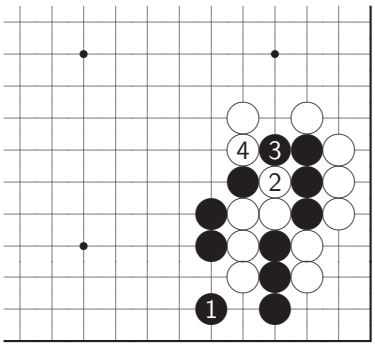

3
4 2
1

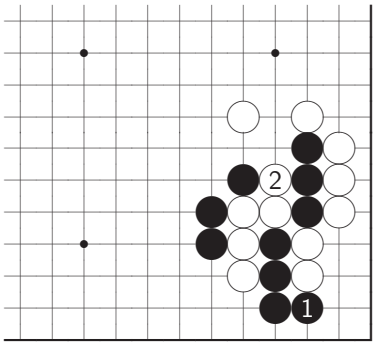

1
3 2 4

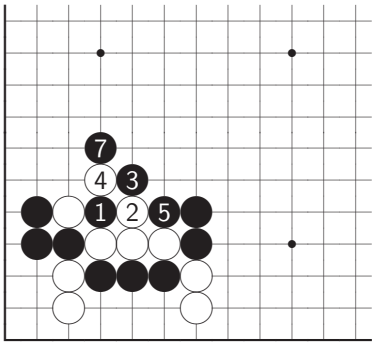

1
5 4 2 6
3

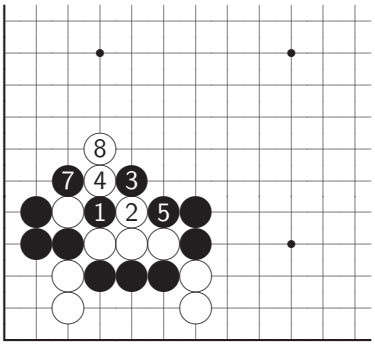

1
3 2 4

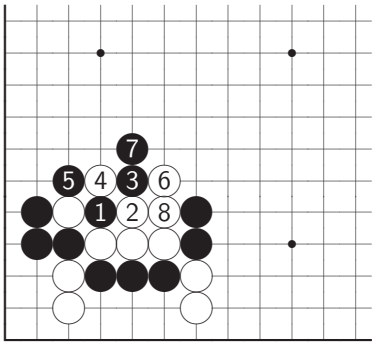

1
3
5 4 2 6

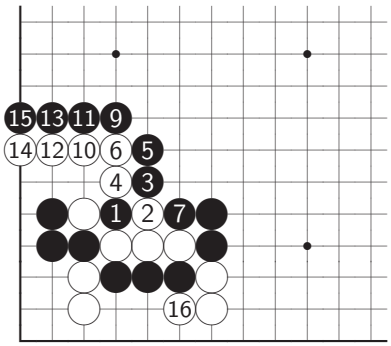

4 3
2
1

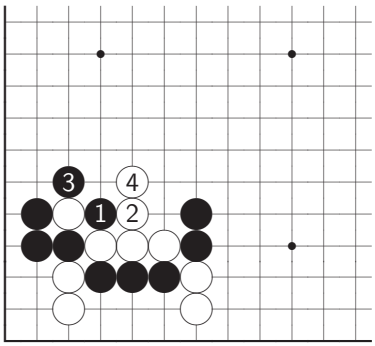

2
1

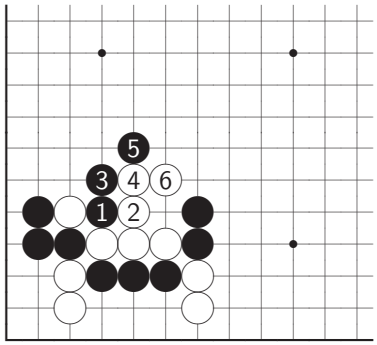

7
4 3
1 2 5

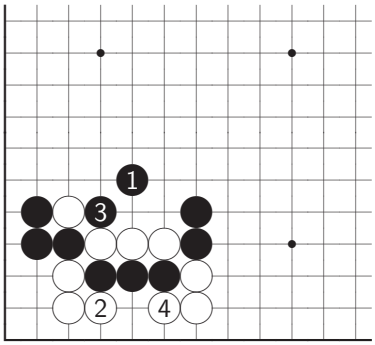

8
7 4 3
1 2 5

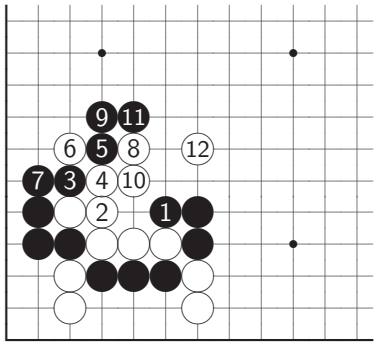

7
5 4 3 6
1 2 8

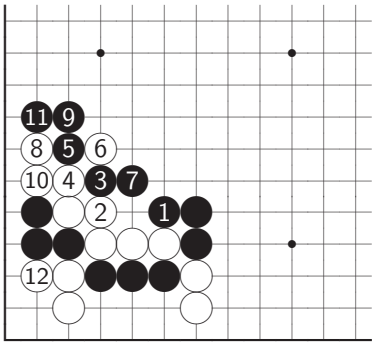

15 13 11 9
14 12 10 6 5
4 3
1 2 7
16

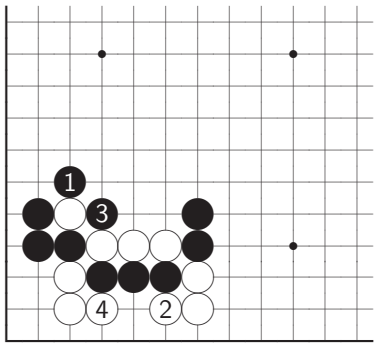

3 4
1 2

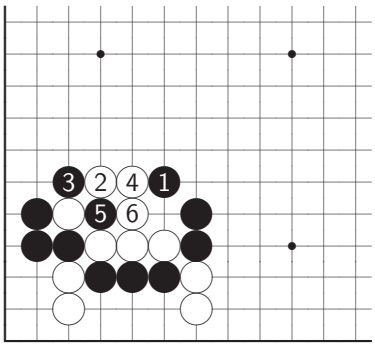

5
3 4 6
1 2

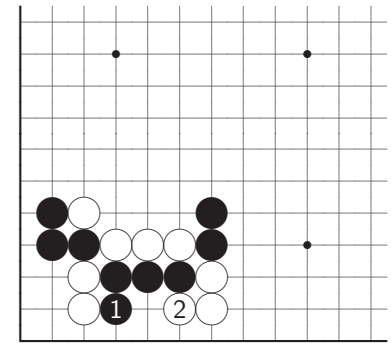

1
3
2 4

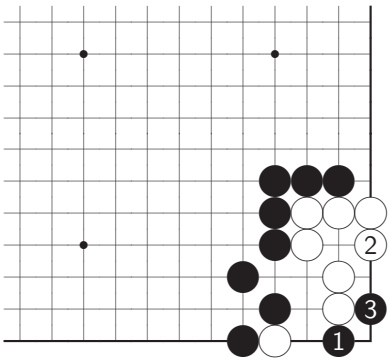

9 11
6 5 8 12
7 3 4 10
2 1

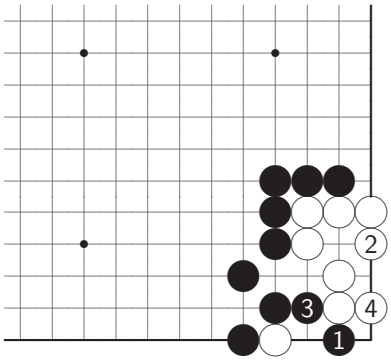

11 9
8 5 6
10 4 3 7
2 1
12

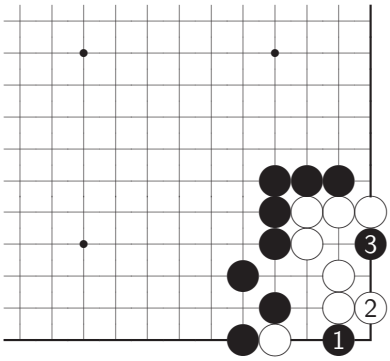

1
3
4 2

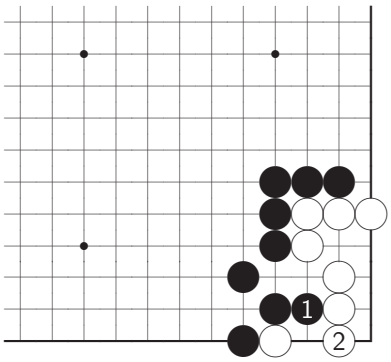

3 2 4 1
5 6

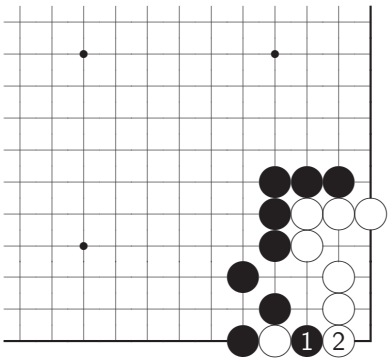

1
2

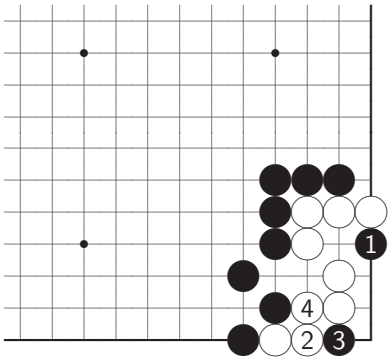

2
3
1

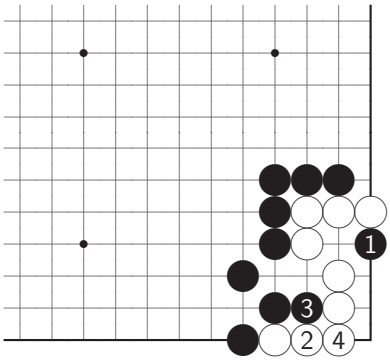

2
3
4
1

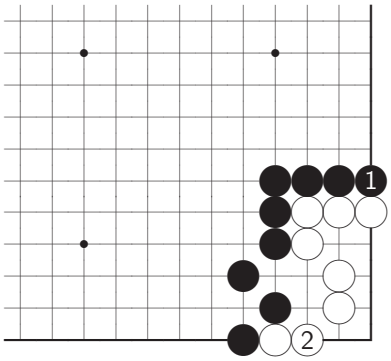

3
2
1

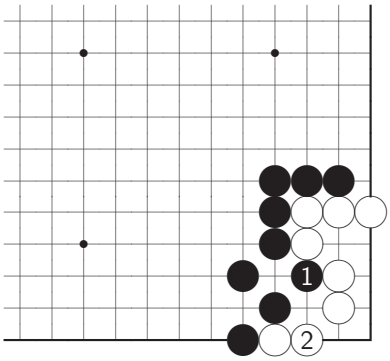

1
2

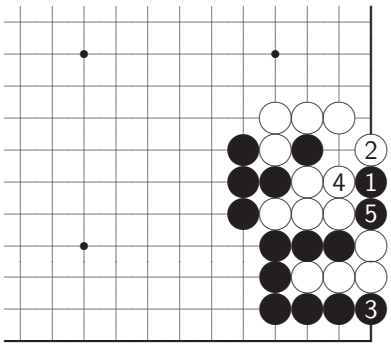

1
2

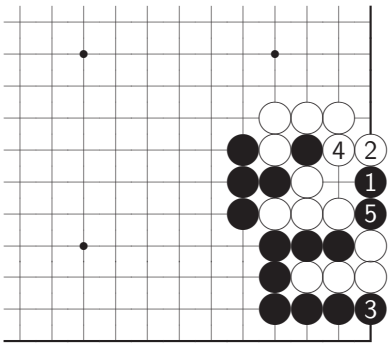

1
4
2
3

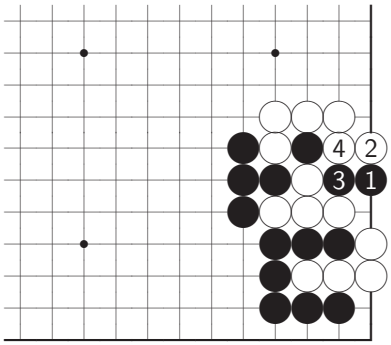

1
3
2
4

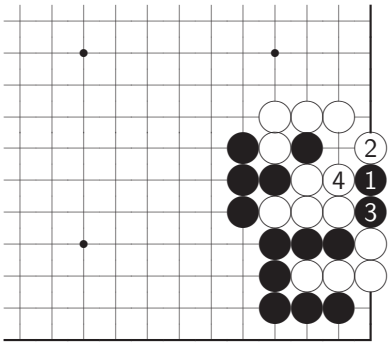

1
2

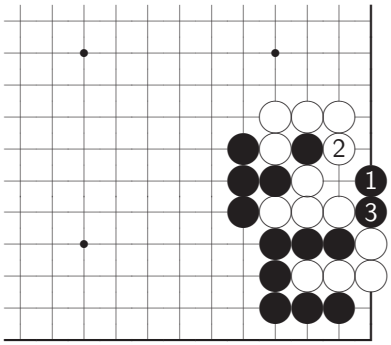

1
2

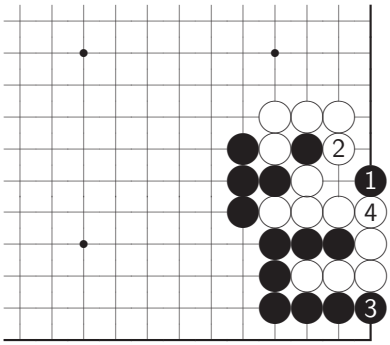

2
4
1
5
3

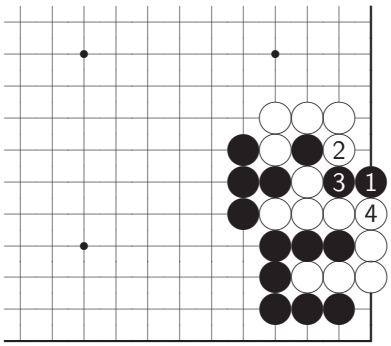

4
2
1
5
3

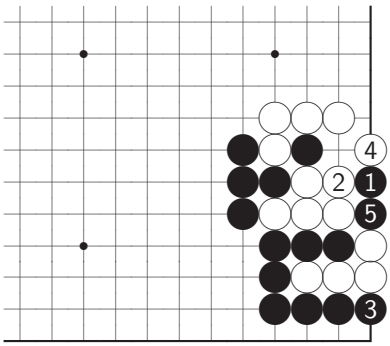

4 2
3 1

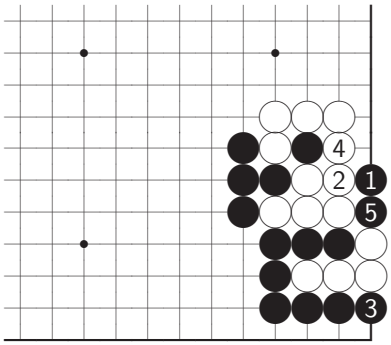

2
4 1
3

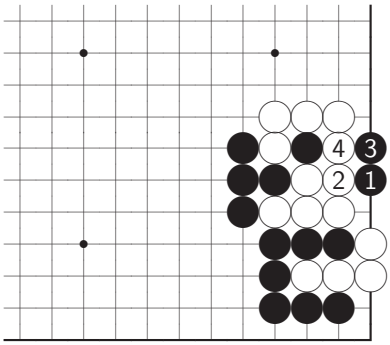

2
1
3

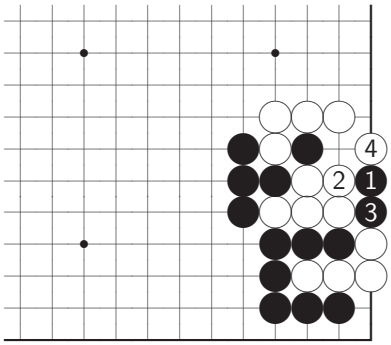

2
1
4
3

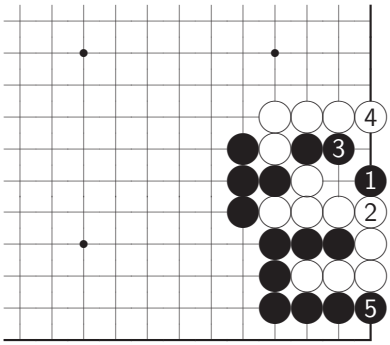

2
3 1
4

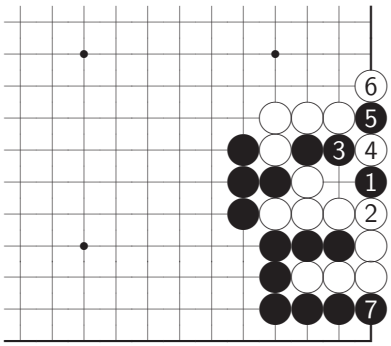

4
2 1
5
3

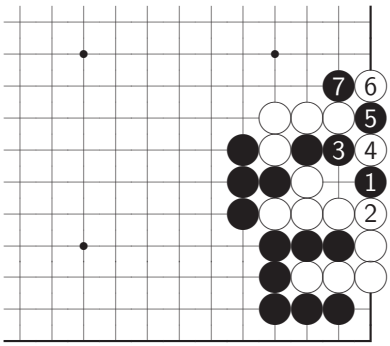

4
2 1
5
3

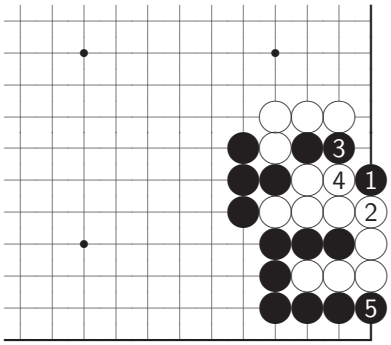

4 3
2 1

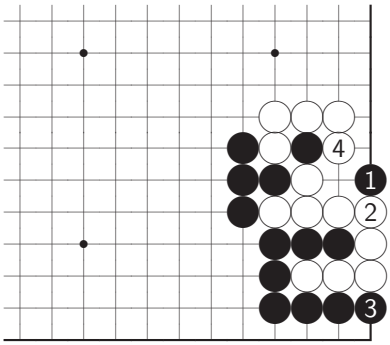

4
2 1
3

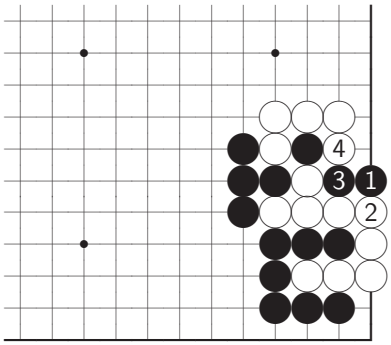

4
3
1
2
5

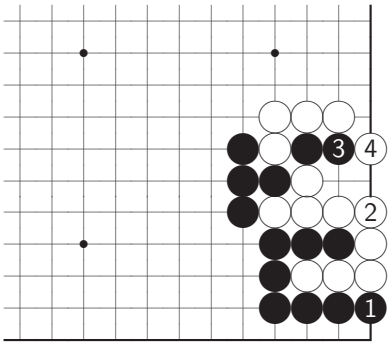

6
5
3 4
1
2
7

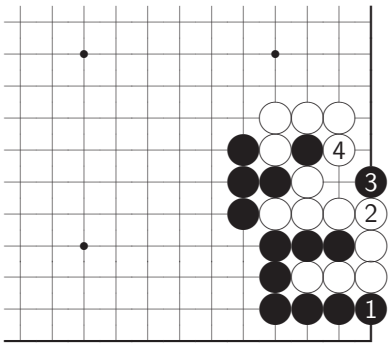

7 6
5
3 4
1
2

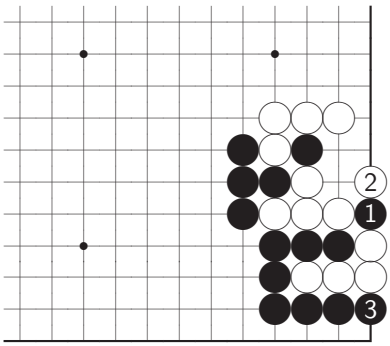

3
4
1
2
5

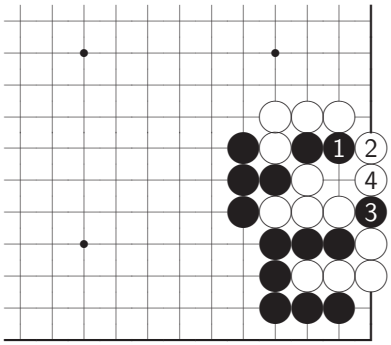

4
1
2
3

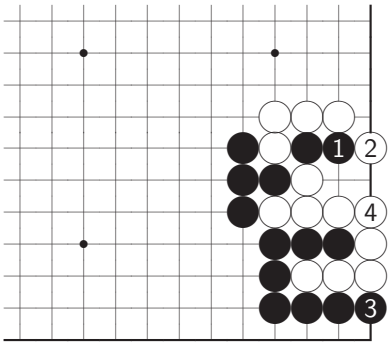

4
3
1
2

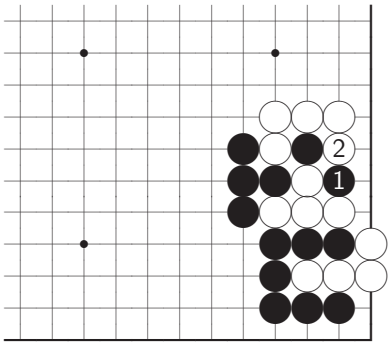

3
4
2
1

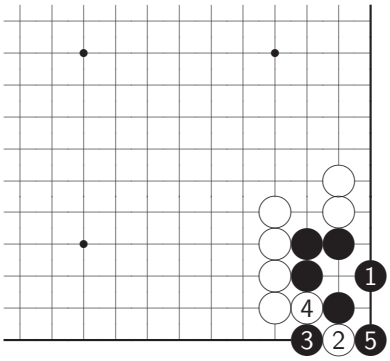

4
3
2
1

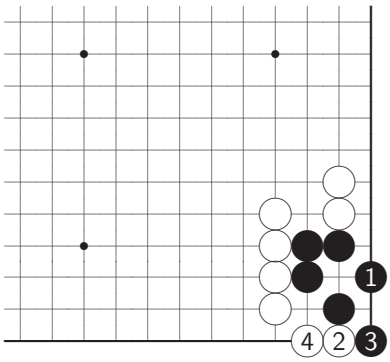

2
1
3

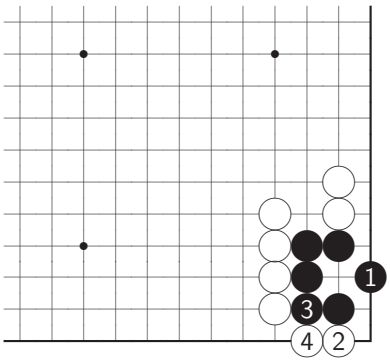

1
2
4
3

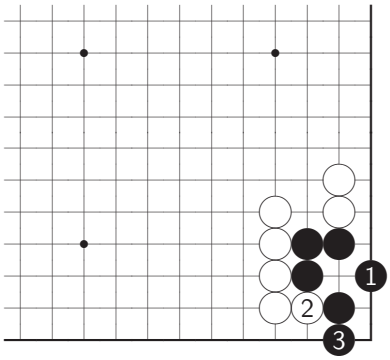

1
2
4
3

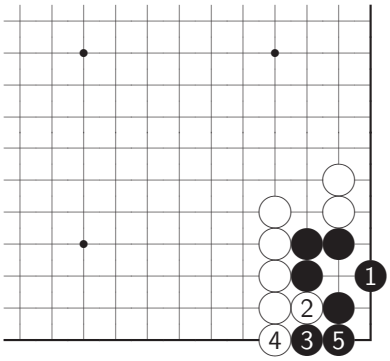

2
1

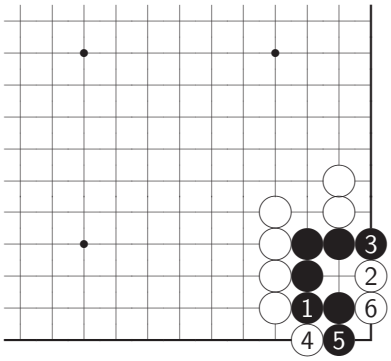

1
4
3
2
5

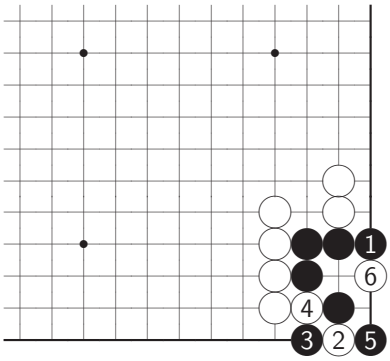

1
4
2
3

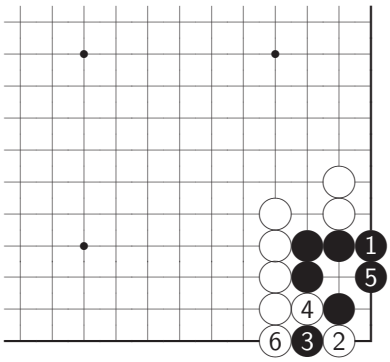

1
3
4
2

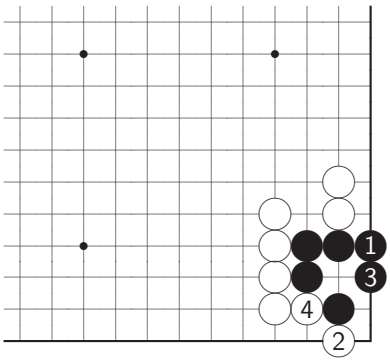

1
2
3

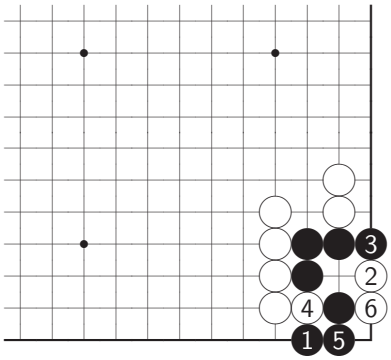

1
2
4 3 5

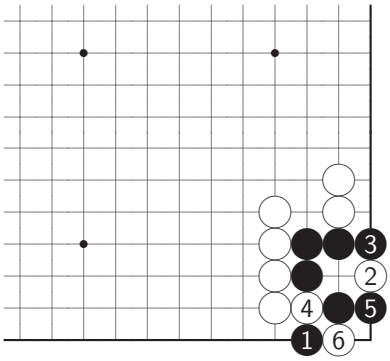

3
2
1 6
4 5

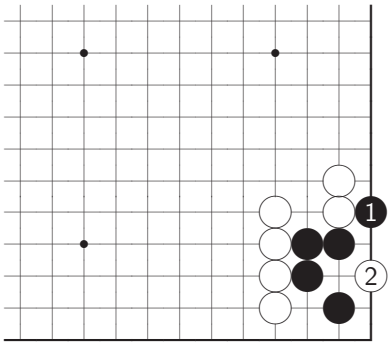

1
6
4
3 2 5

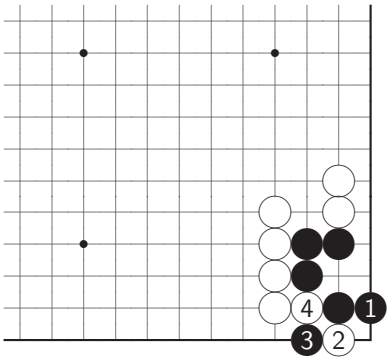

1
5
4
6 3 2

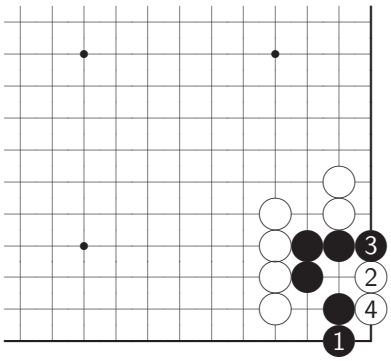

1
3
4
2

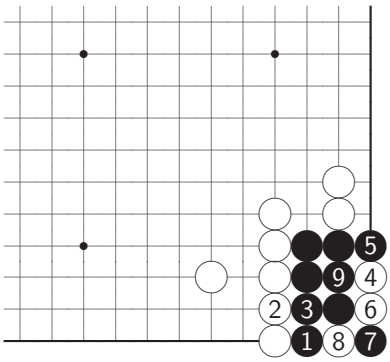

3
2
4 6
1 5

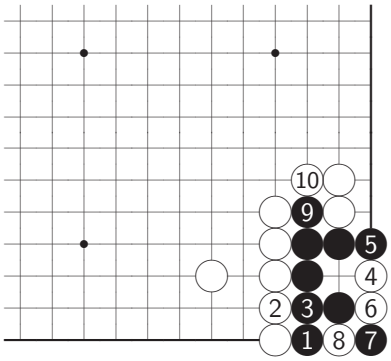

3
2
4 5
1 6

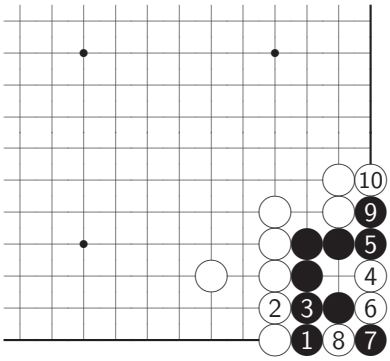

1
2

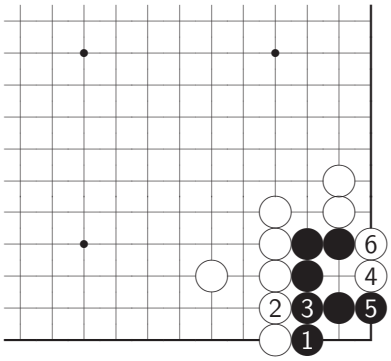

4 1
3 2

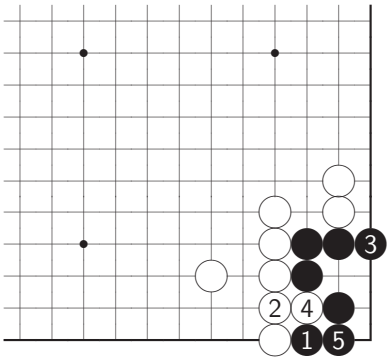

3
2
4
1

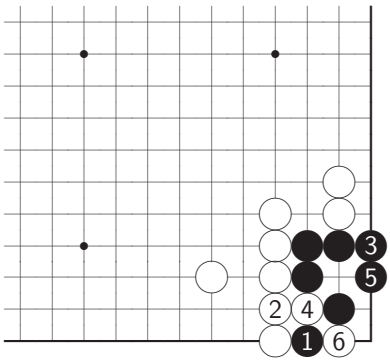

5
9 4
2 3 6
1 8 7

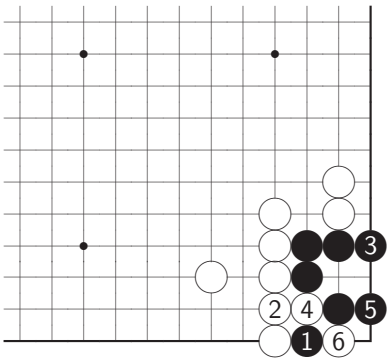

10
9
5
4
2 3 6
1 8 7

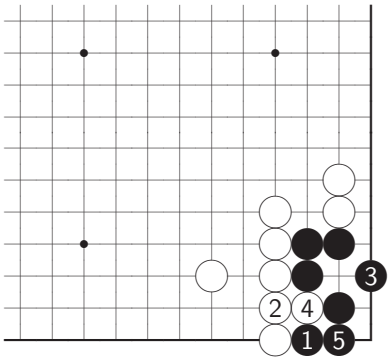

10
9
5
4
2 3 6
1 8 7

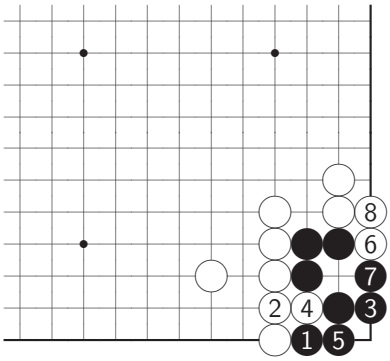

6
4
2 3 5
1

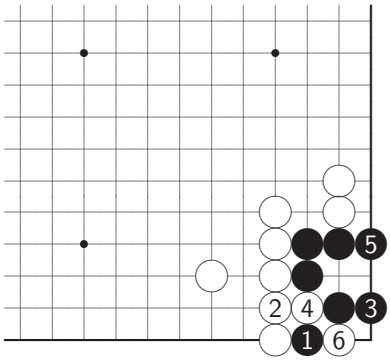

3
2 4
1 5

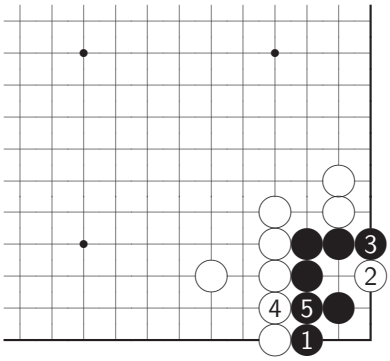

3
5
2 4
1 6

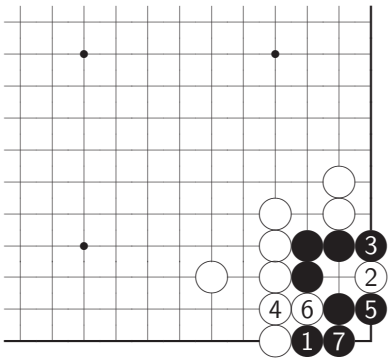

3
2 4 5
1 6

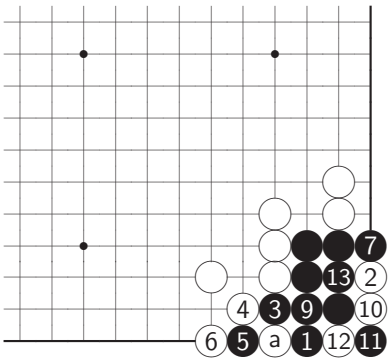

3
2 4
1 5

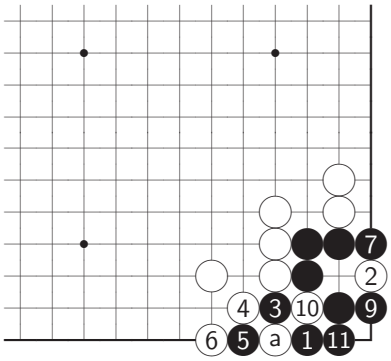

8
6
7
2 4 3
1 5

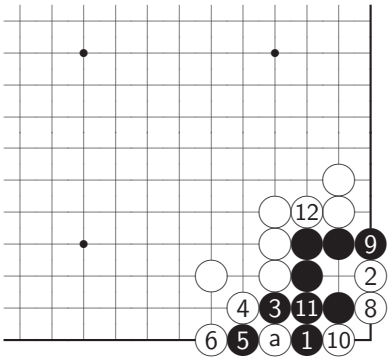

5
2 4 3
1 6

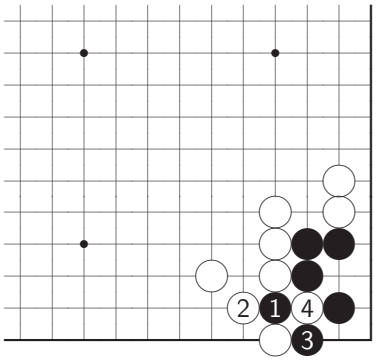

3
2
4 5
1

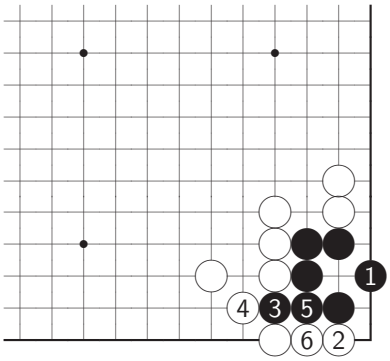

3
2
4 6 5
1 7

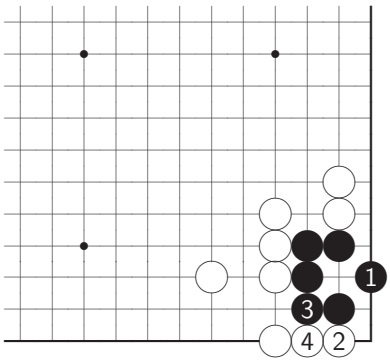

7
13 2
4 3 9 10
6 5 a 1 12 11

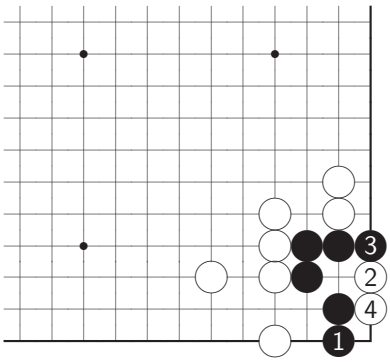

7
2
4 3 10 9
6 5 a 1 11

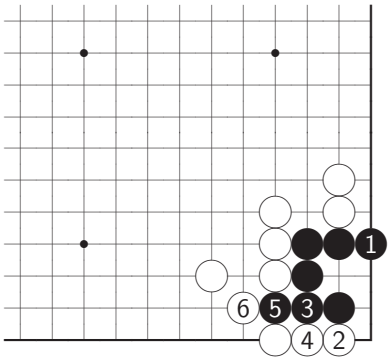

12
9
2
4 3 11 8
6 5 a 1 10

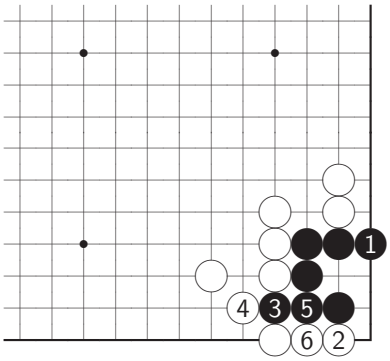

2 1 4
3

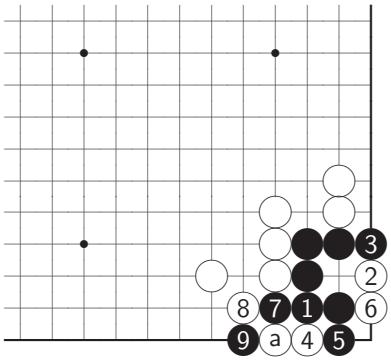

1
4 3 5
6 2

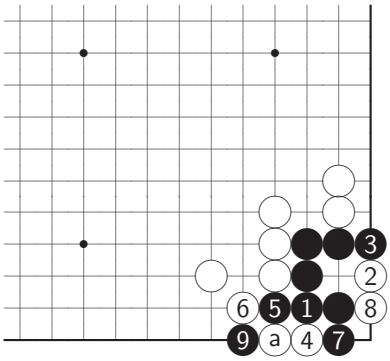

1
3
4 2

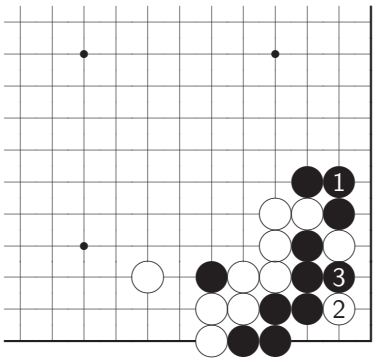

3
2
4
1

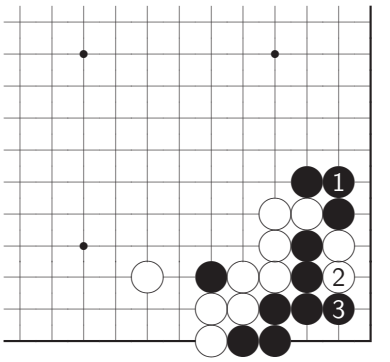

1
6 5 3
4 2

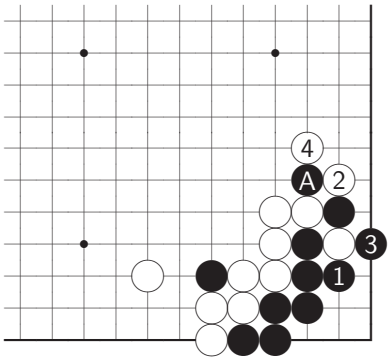

1
4 3 5
6 2

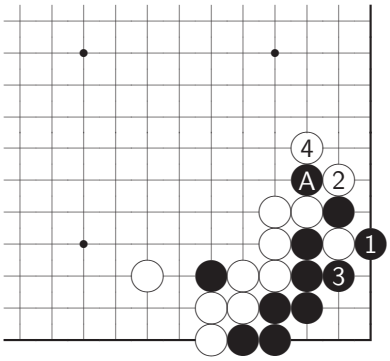

3
2
8 7 1 6
9 a 4 5

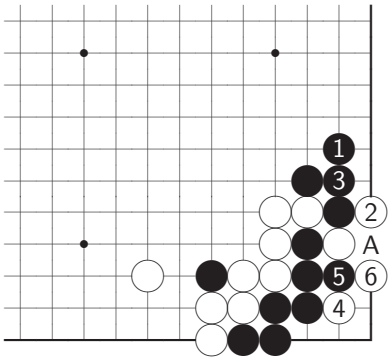

3
2
6 5 1 8
9 a 4 7

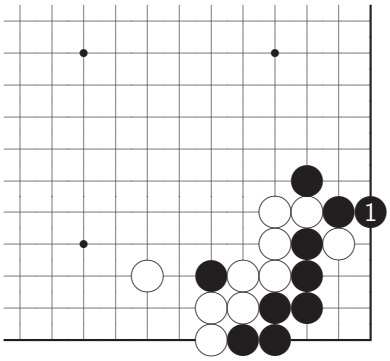

1
3
2

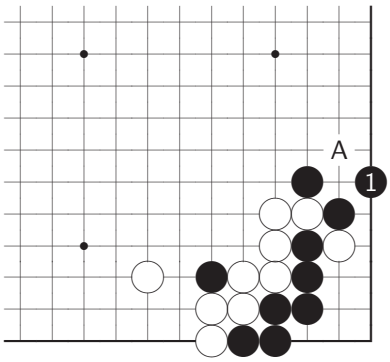

1
2
3

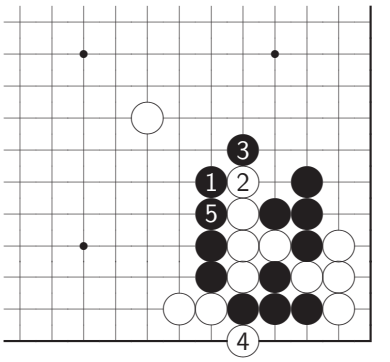

4
A
2
3
1

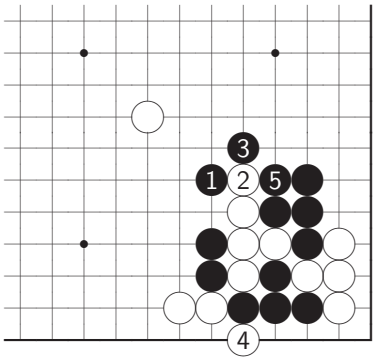

4
A
2
1
3

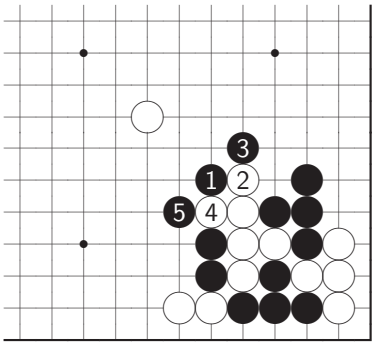

1
3
2
A
5
6
4

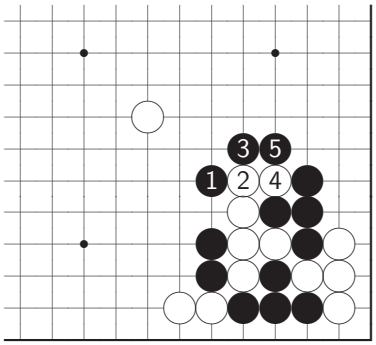

1

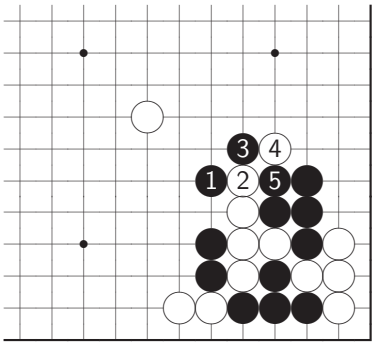

A
1

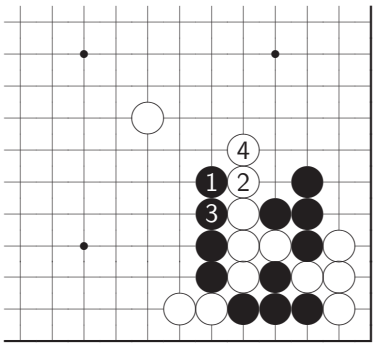

3
1
2
5
4

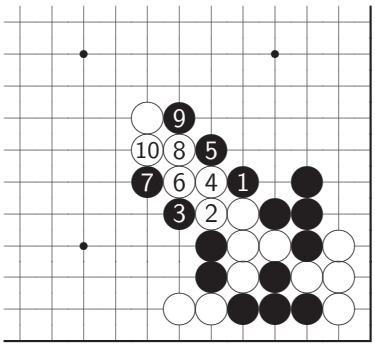

3
1 2 5
4

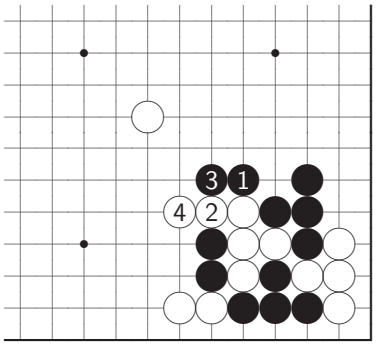

3
1 2
5 4

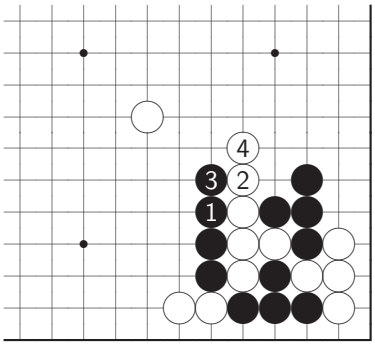

3 5
1 2 4

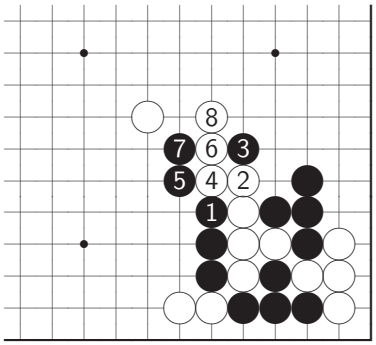

3 4
1 2 5

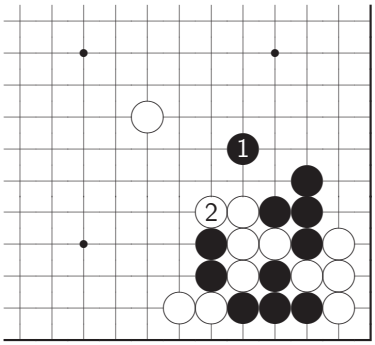

4
1 2
3

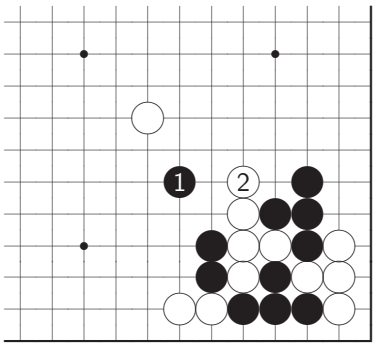

9
10 8 5
7 6 4 1
3 2

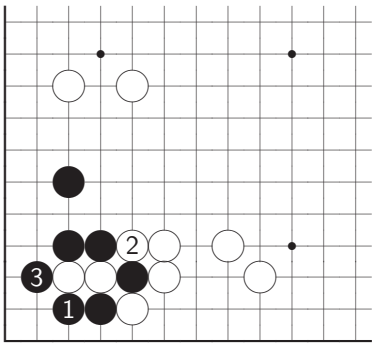

3 1
4 2

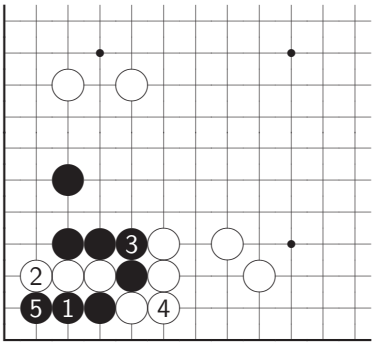

4
3 2
1

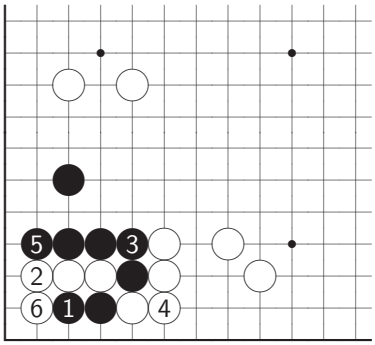

8
7 6 3
5 4 2
1

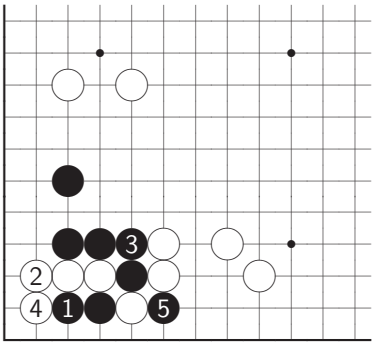

1
2

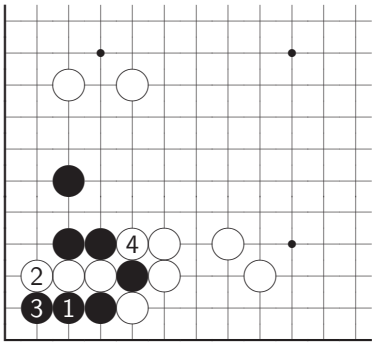

1 2

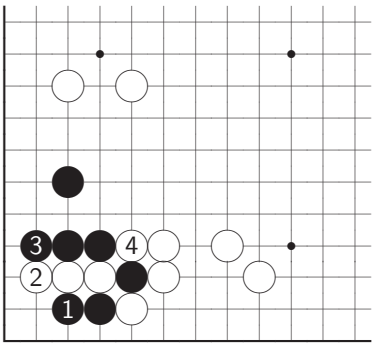

2
3
1

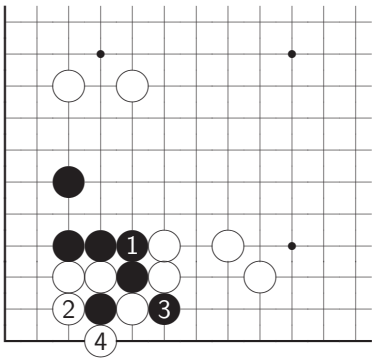

3
2
5 1 4

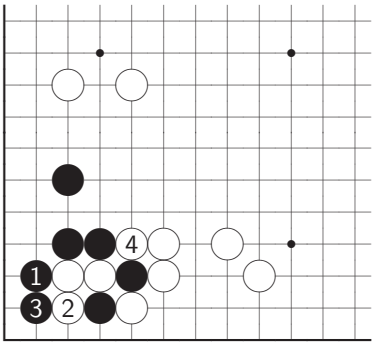

5 3
2
6 1 4

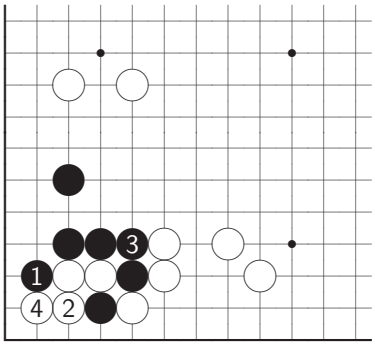

3
2
4 1 5

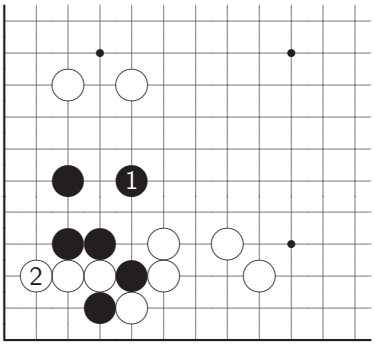

4
2
3 1

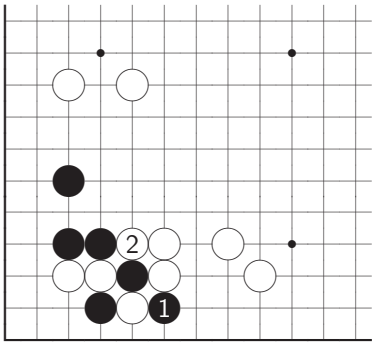

3 4
2
1

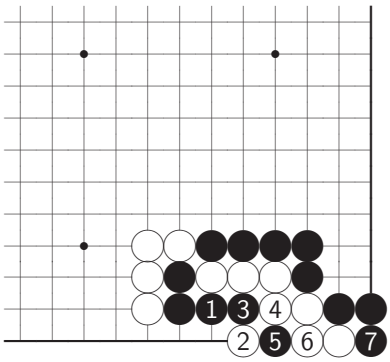

1
2 3
4

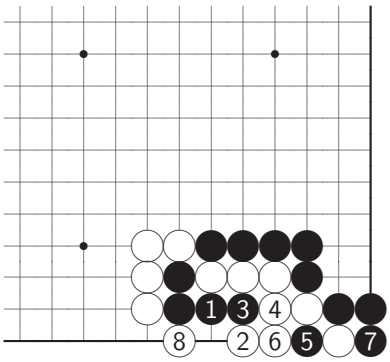

4
1
3 2

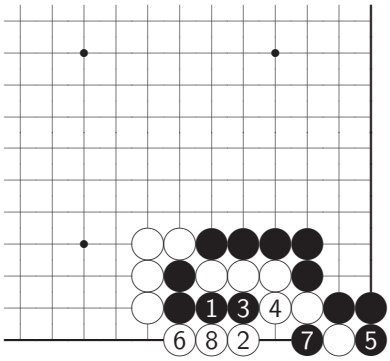

3
1
4 2

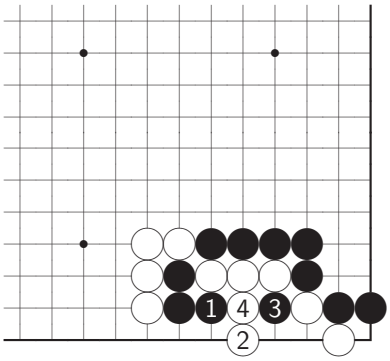

1
2

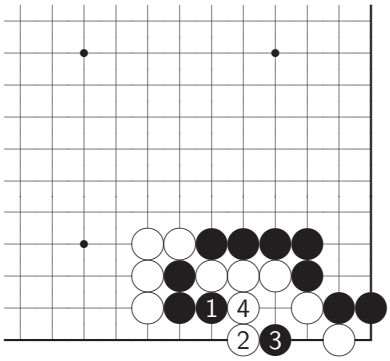

2
1

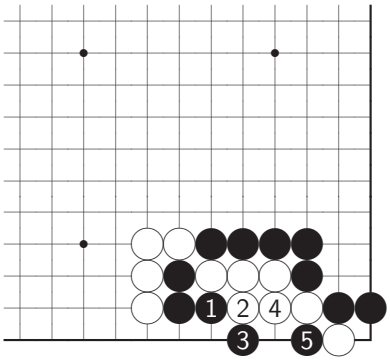

1 3 4
2 5 6 7

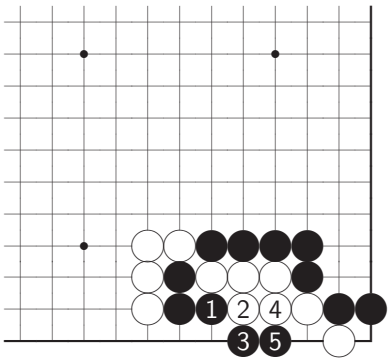

1 3 4
8 2 6 5 7

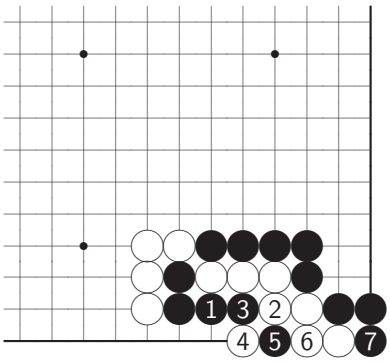

1 3 4
6 8 2 7 5

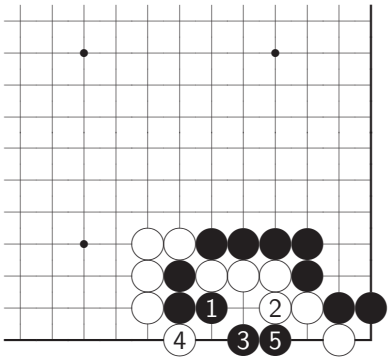

1 4 3
2

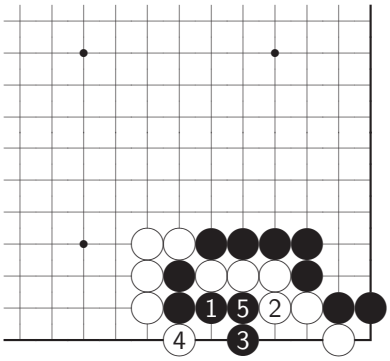

1 4
2 3

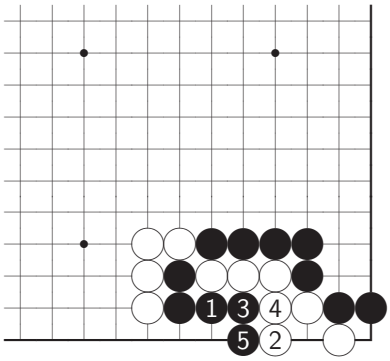

1 2 4
3 5

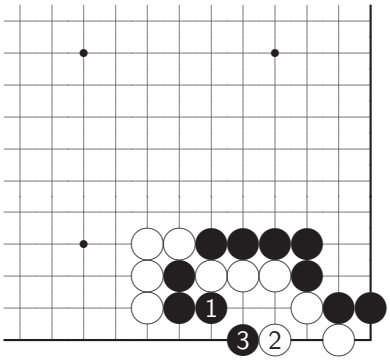

1 2 4
3 5

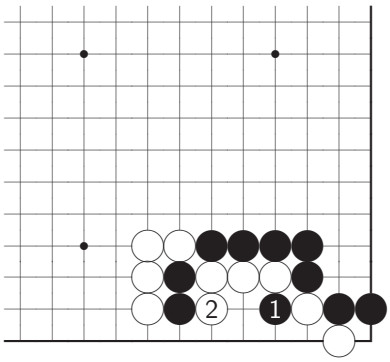

1 3 2
4 5 6 7

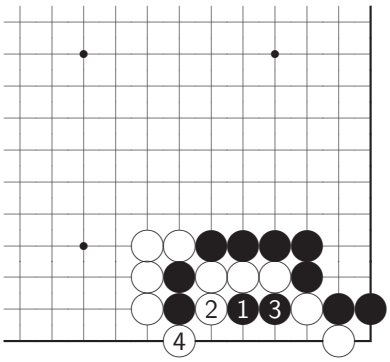

1
2
4
3
5

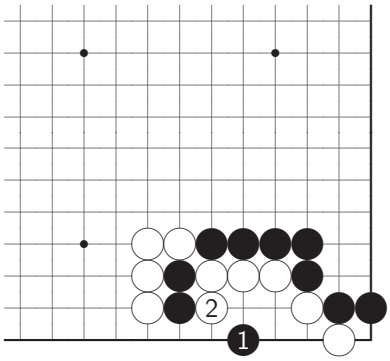

1
5
2
4
3

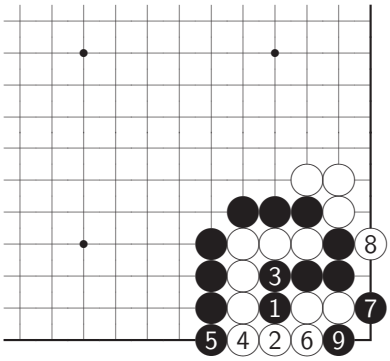

1
3
4
5
2

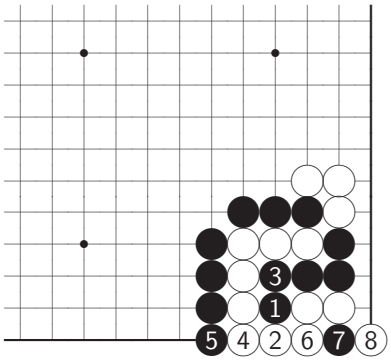

1
3
2

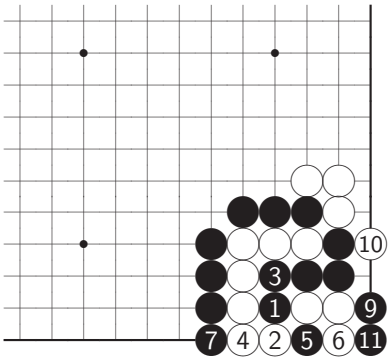

2
1

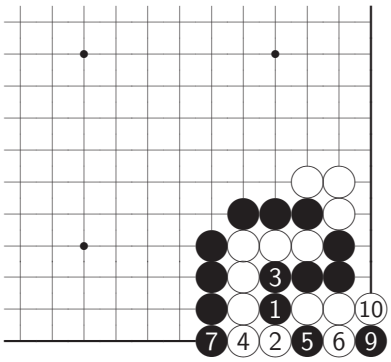

2
1
3
4

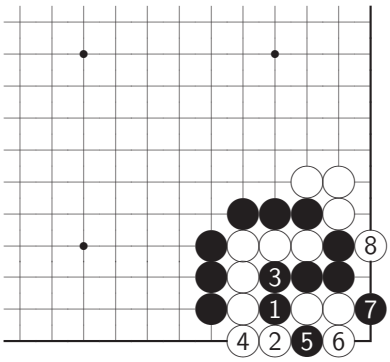

2
1

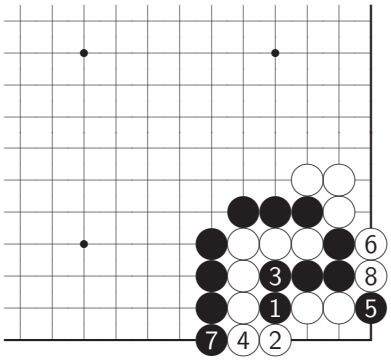

8
3
1
7
5 4 2 6 9

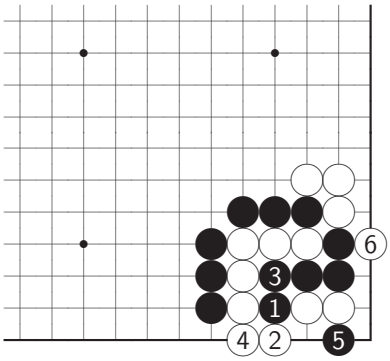

3
1
5 4 2 6 7 8

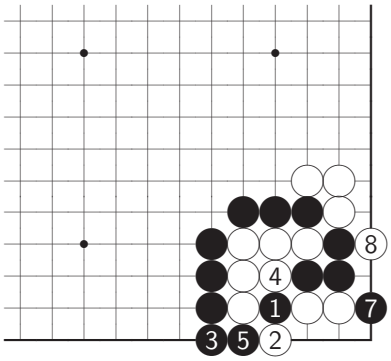

10
3
1
9
7 4 2 5 6 11

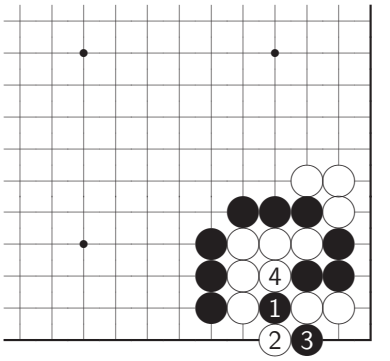

3
1
10
7 4 2 5 6 9

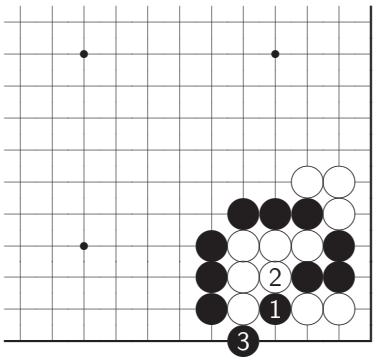

8
3
1
7
4 2 5 6

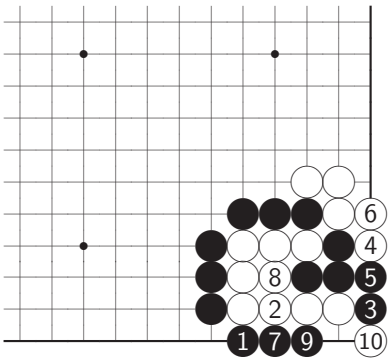

6
3
8
1
5
7
4
2

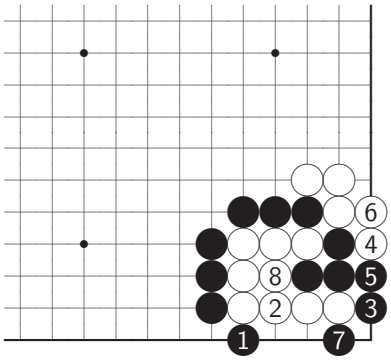

6
3
1
4
2
5

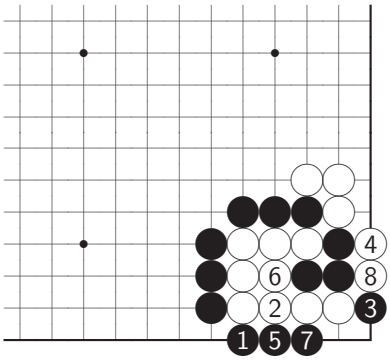

8
4
1
7
3
5
2

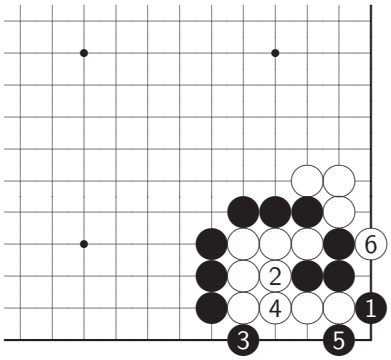

4
1
2
3

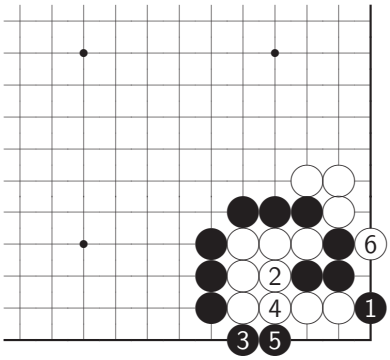

2
1
3

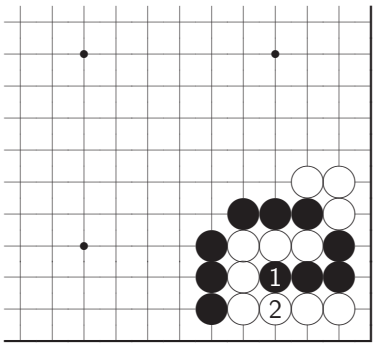

6
4
8
5
2
3
1
7
9
10

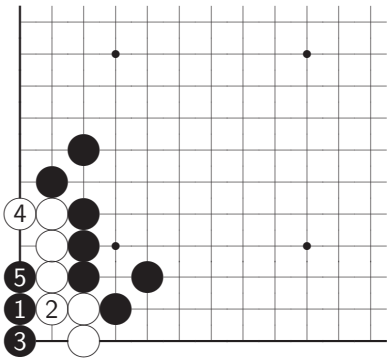

6
4
8
5
2
3
1
7

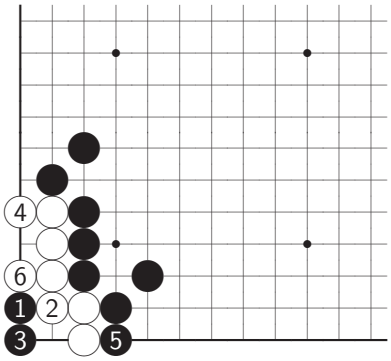

4
6
8
2
3
1
5
7

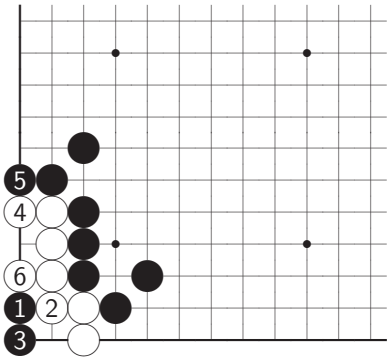

6
2
4
1
3
5

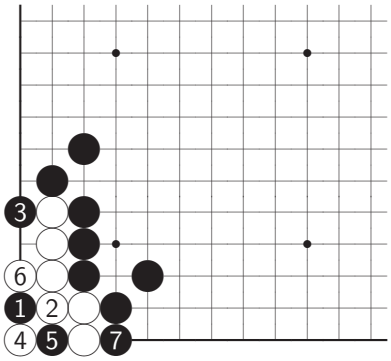

6
2
4
1
3
5

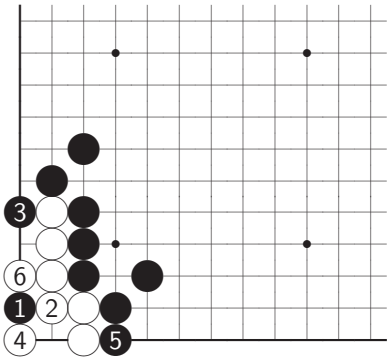

1
2

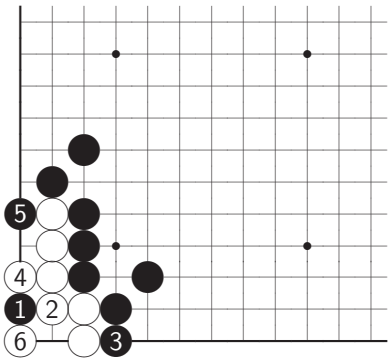

4
5
1
2
3

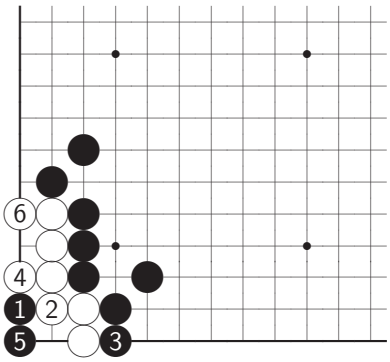

4
6
1 2
3 5

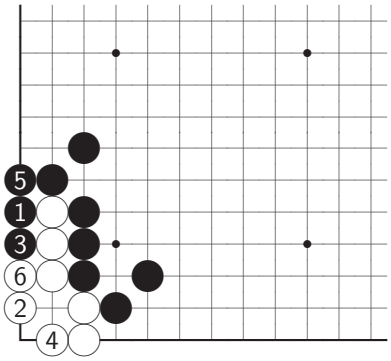

5
4
6
1 2
3

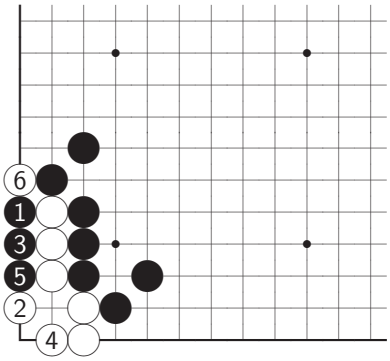

3
6
1 2
4 5 7

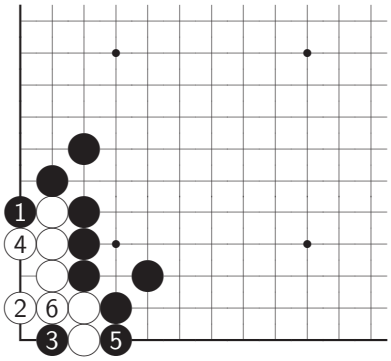

3
6
1 2
4 5

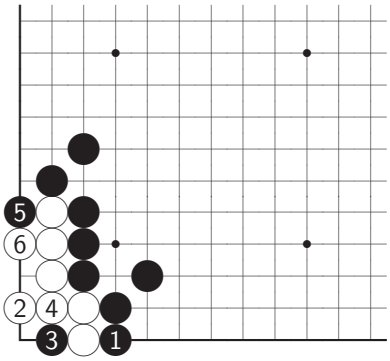

5
4
1 2
6 3

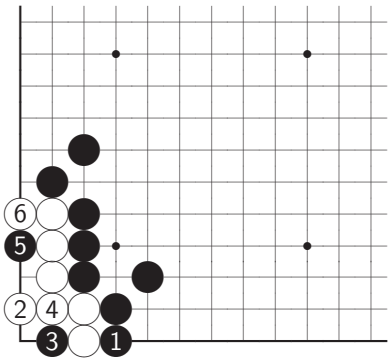

6
4
1 2
5 3

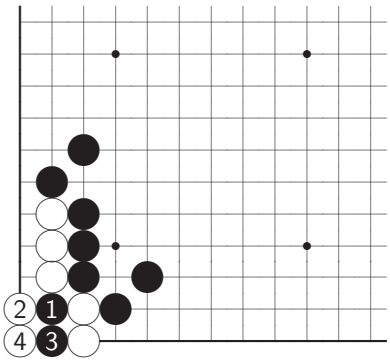

5
1
3
6
2
4

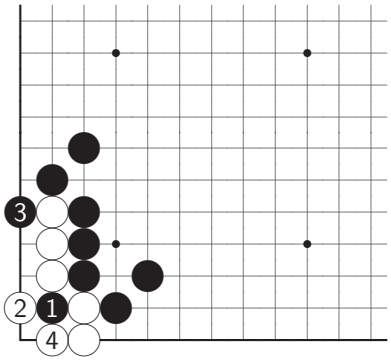

6
1
3
5
2
4

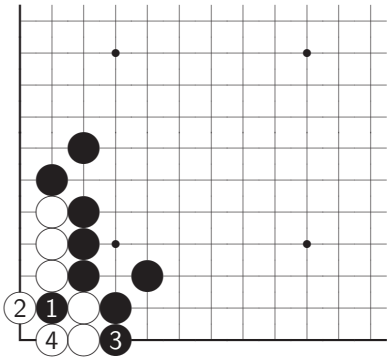

1
4
2
6
3
5

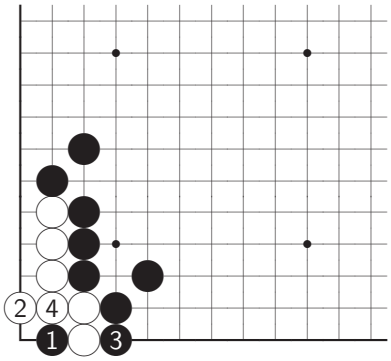

5
6
2
4
3
1

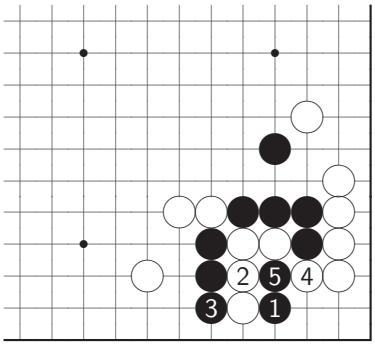

6
5
2
4
3
1

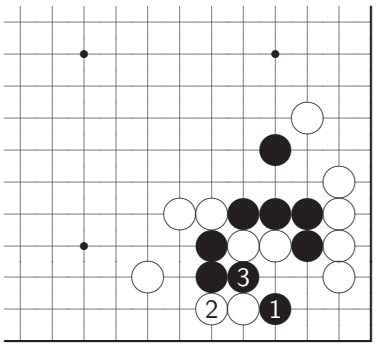

2
1
4
3

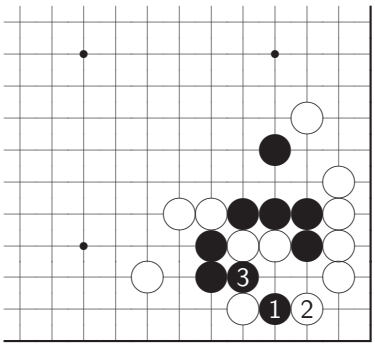

3
2 1
4

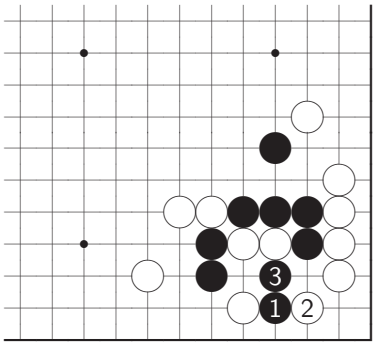

2 1
4 3

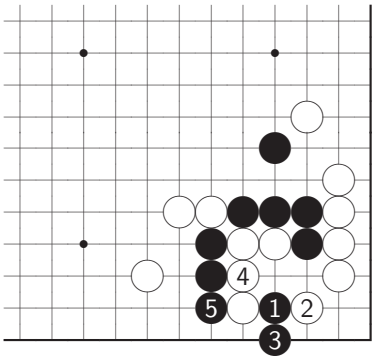

2 4
1 3

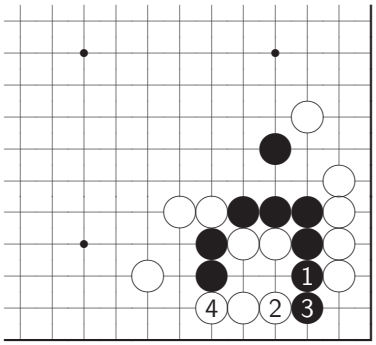

2 5 4
3 1

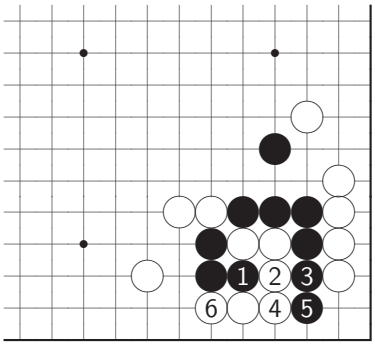

3
2 1

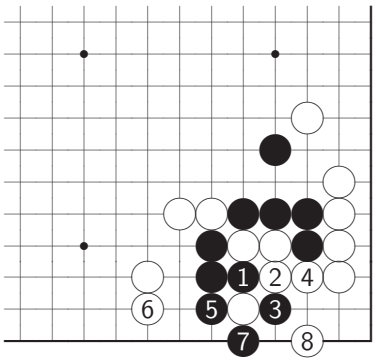

3
1 2

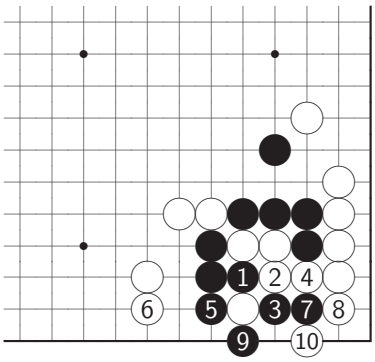

3
1 2

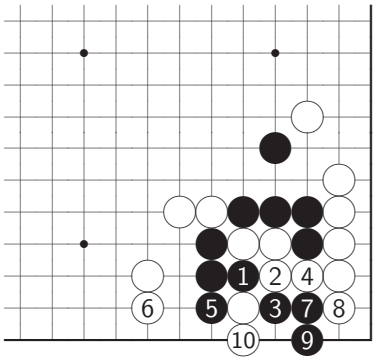

4
5 1 2
3

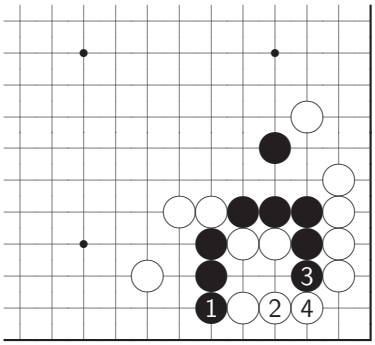

1
4 2 3

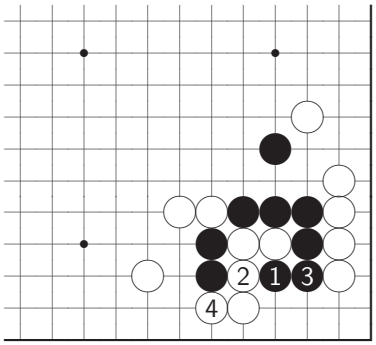

1 2 3
6 4 5

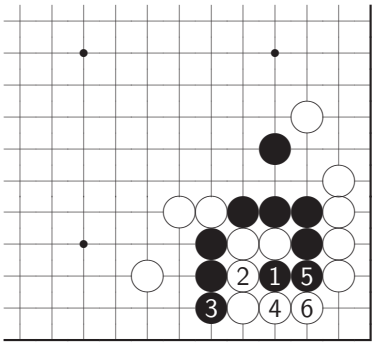

1 2 4
6 5 3
7 8

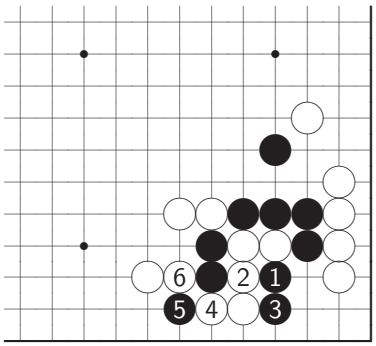

1 2 4
6 5 3 7 8
9 10

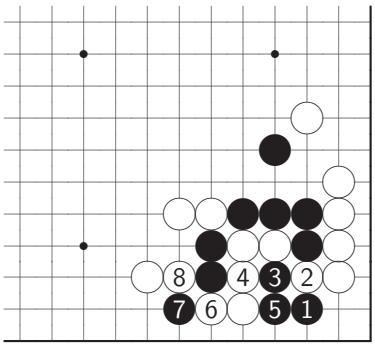

1 2 4
6 5 3 7 8
10 9

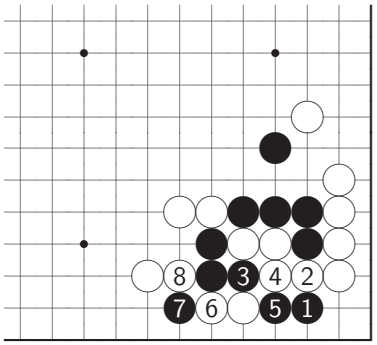

3
1 2 4

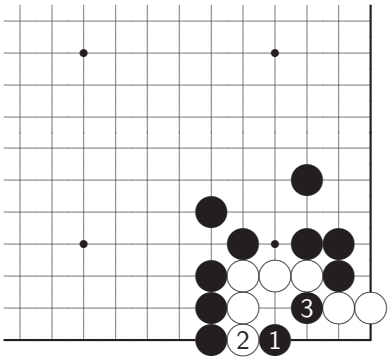

2 1 3
4

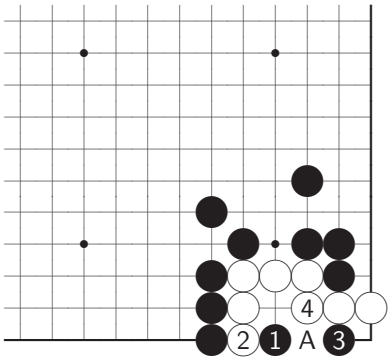

2 1 5
3 4 6

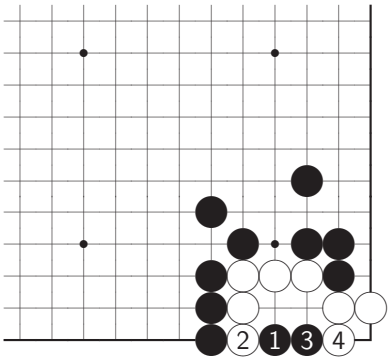

6 2 1
5 4 3

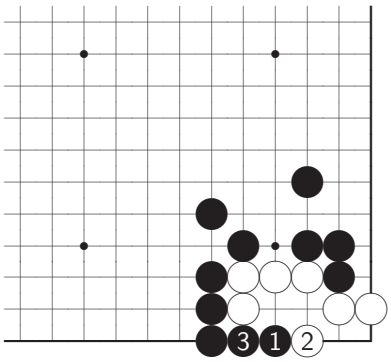

8 4 3 2
7 6 5 1

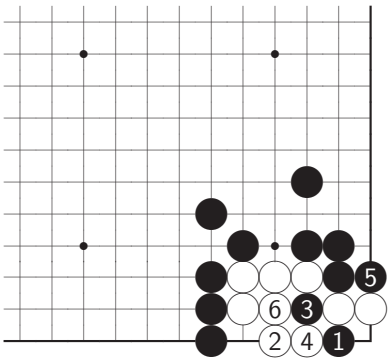

8 3 4 2
7 6 5 1

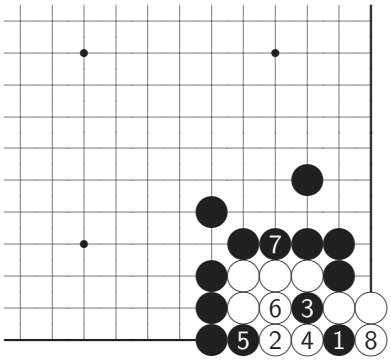

3
2 1

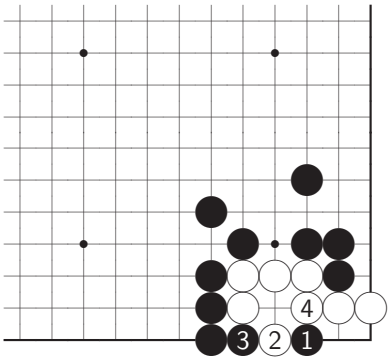

4
2 1 A 3

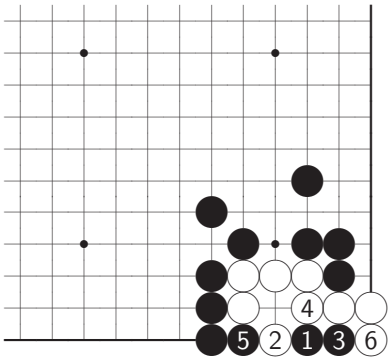

2 1 3 4

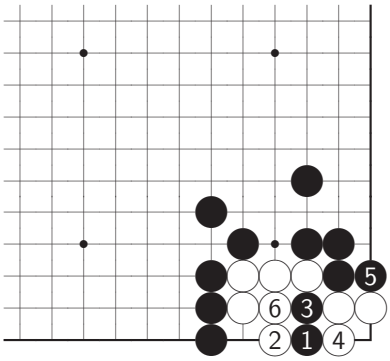

3 1 2

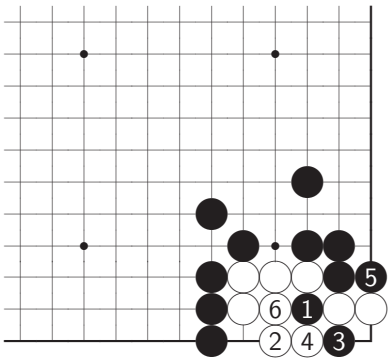

5
6 3
2 4 1

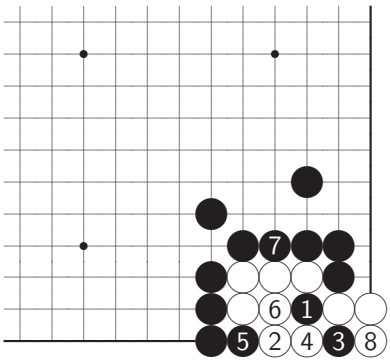

7
6 3
5 2 4 1 8

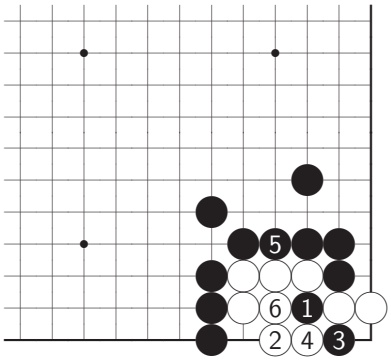

4
3 2 1

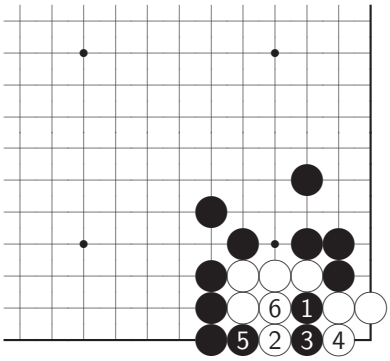

4
5 2 1 3 6

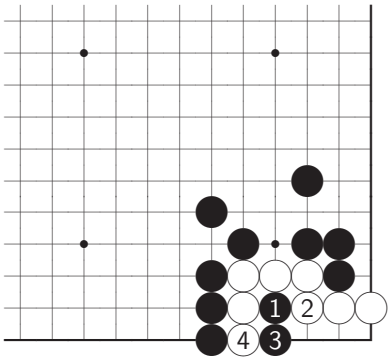

5
6 3
2 1 4

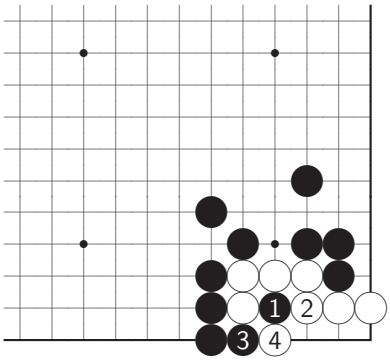

5
6 1
2 4 3

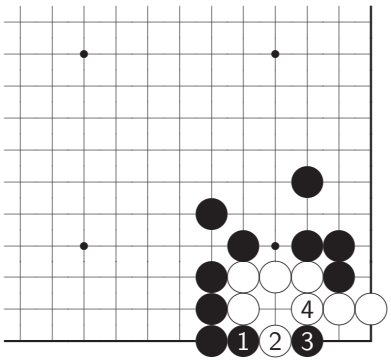

7
6 1
5 2 4 3 8

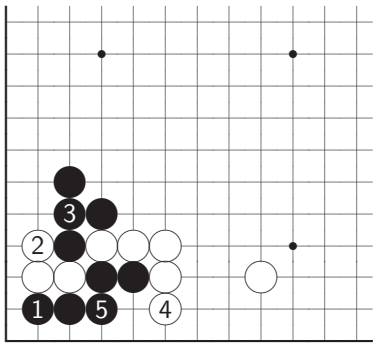

5
6 1
2 4 3

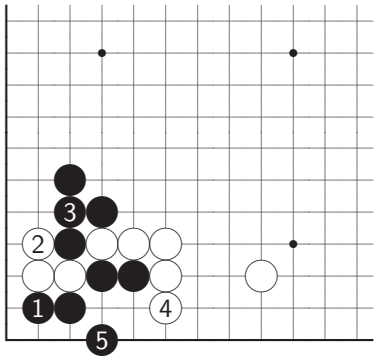

6 1
5 2 3 4

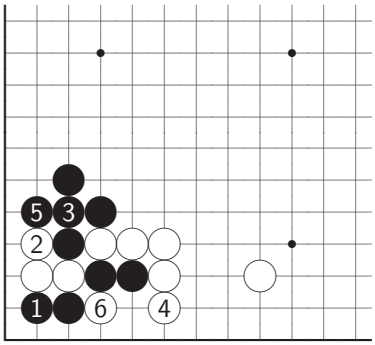

1 2
4 3

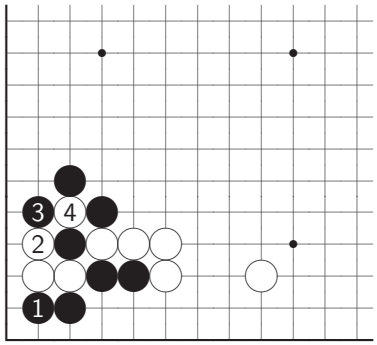

1 2
3 4

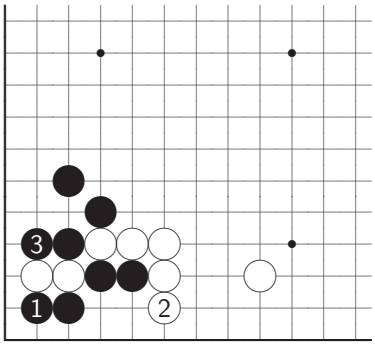

4
1 2 3

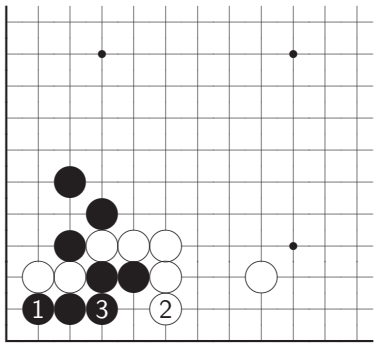

3
2
1 5 4

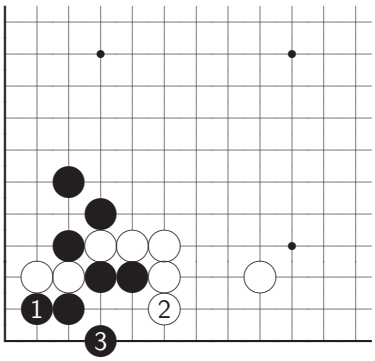

3
2
1
4
5

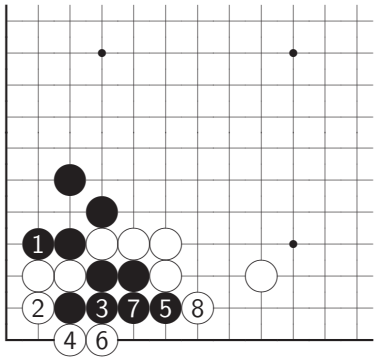

5
3
2
1
6
4

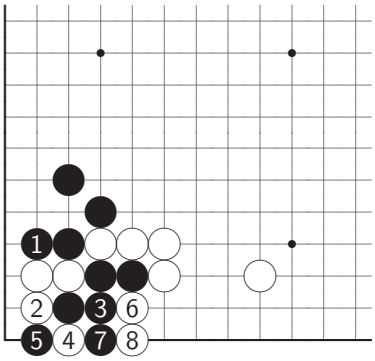

3
4
2
1

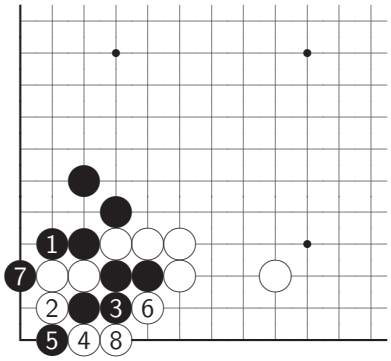

3
1
2

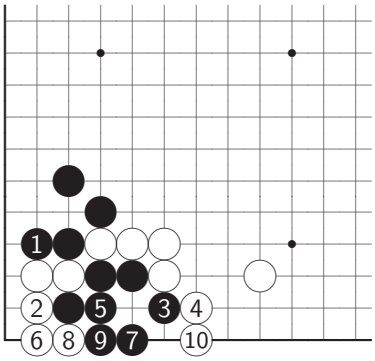

1
3
2

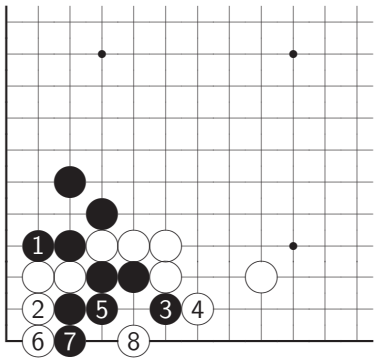

1
2
3

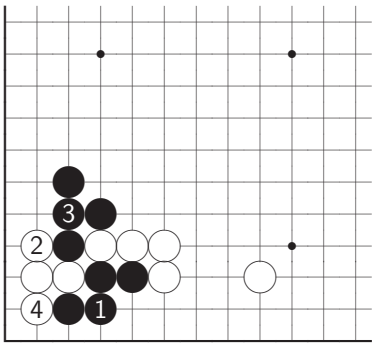

1
2 3 7 5 8
4 6

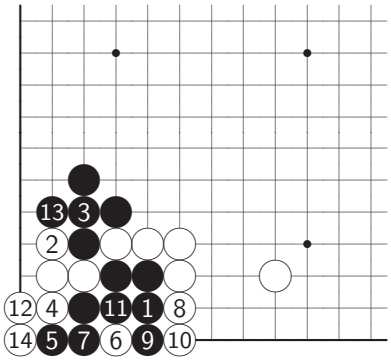

1
2 3 6
5 4 7 8

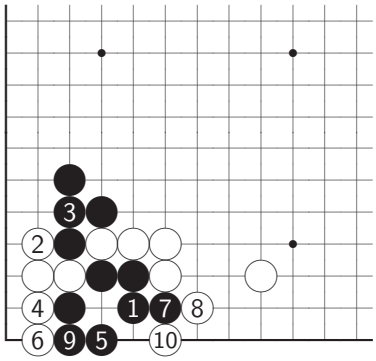

1
7
2 3 6
5 4 8

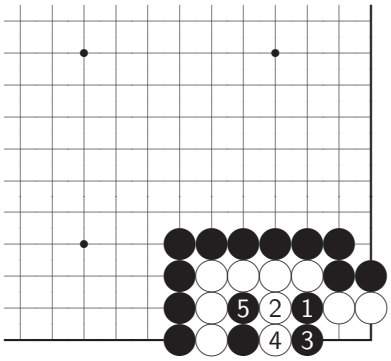

1
2 5 3 4
6 8 9 7 10

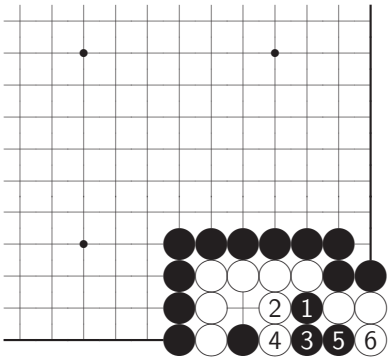

1
2 5 3 4
6 7 8

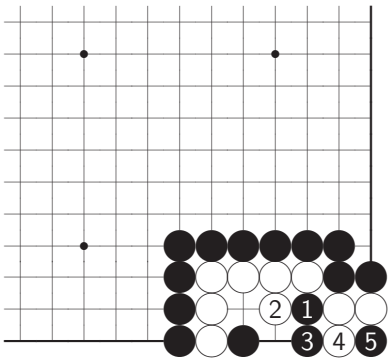

3
2
4 1

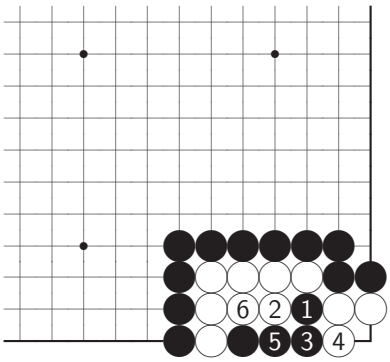

13 3
2
12 4 11 1 8
14 5 7 6 9 10

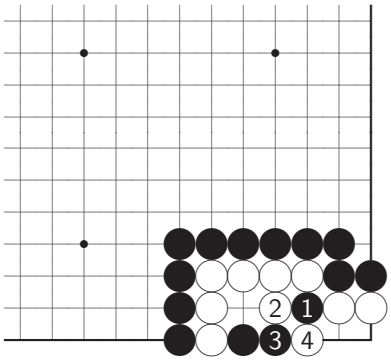

3
2
4 1 7 8
6 9 5 10

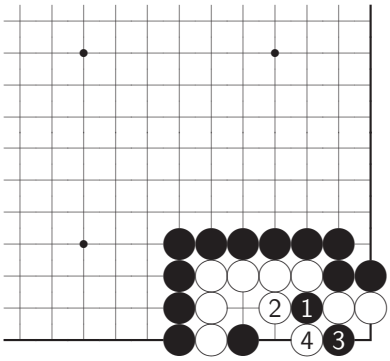

5 2 1
4 3

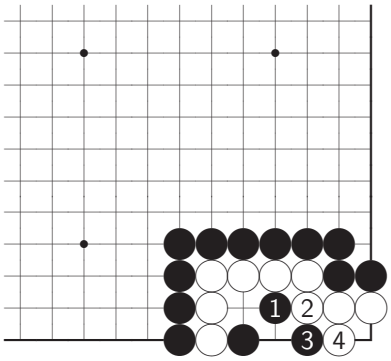

2 1
4 3 5 6

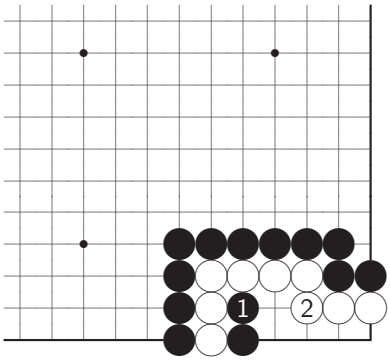

2 1
3 4 5

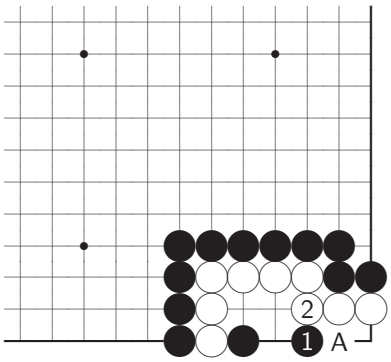

6 2 1
5 3 4

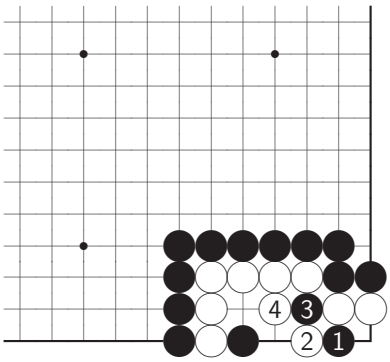

2 1
3 4

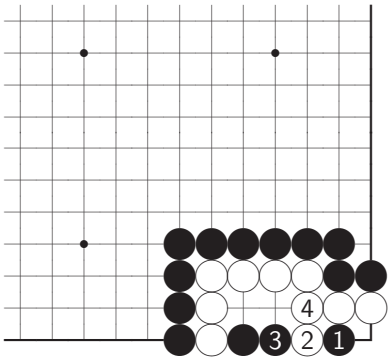

2 1
4 3

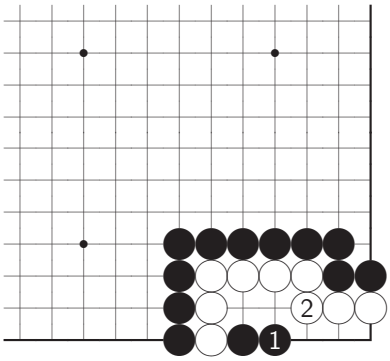

1 2
3 4

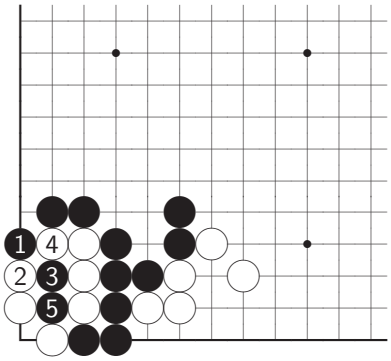

1 2

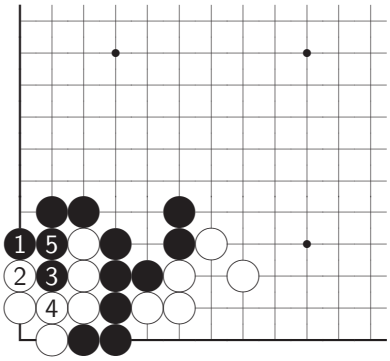

2
1 A

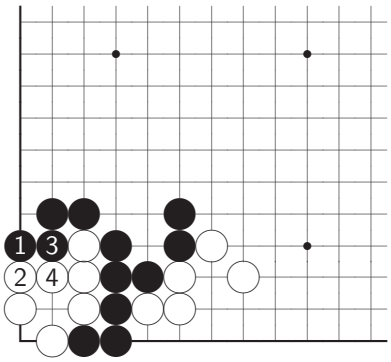

4 3
2 1

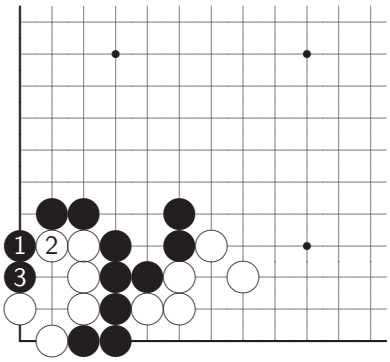

4
3 2 1

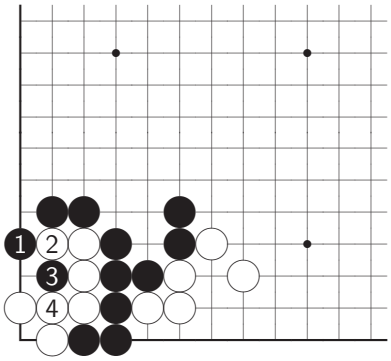

2
1

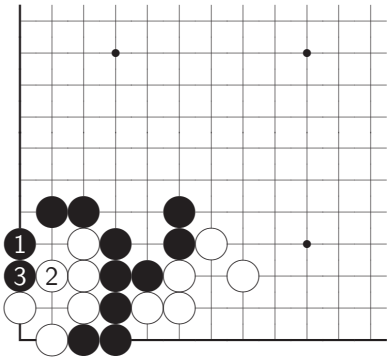

1 4
2 3
5

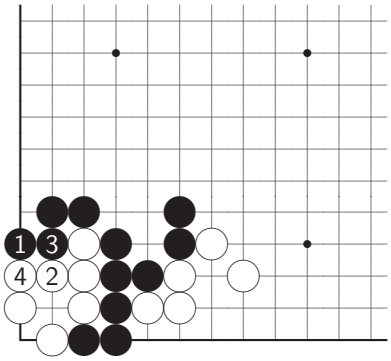

1 5
2 3
4

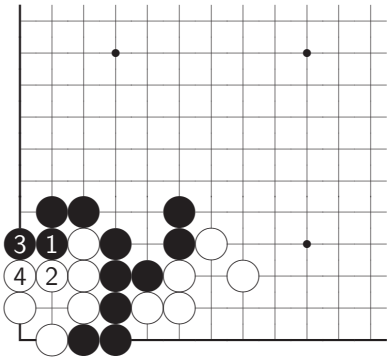

1 3
2 4

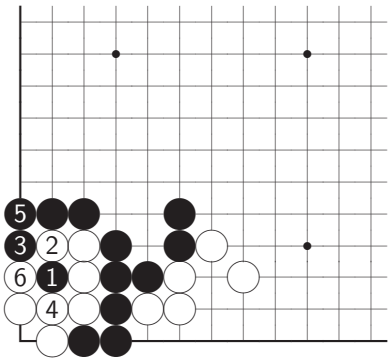

1 2
3

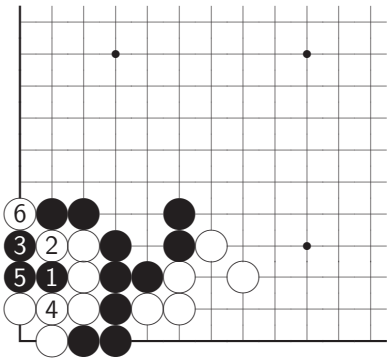

1 2
3
4

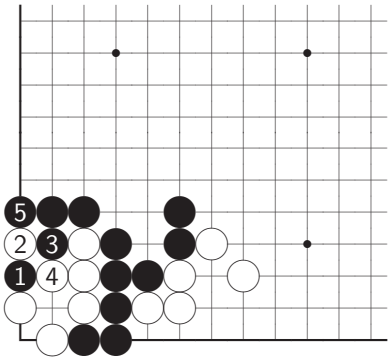

1
3 2

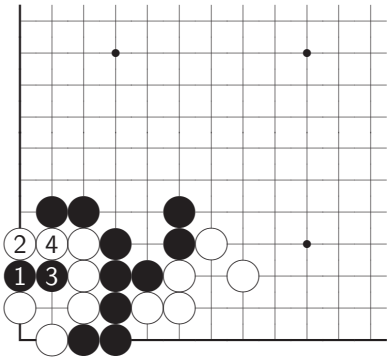

1 3
4 2

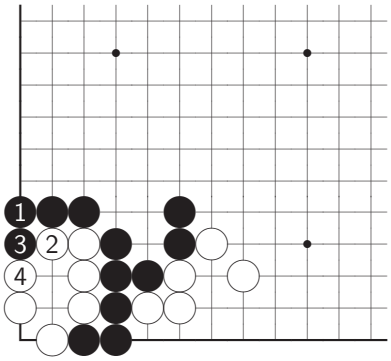

3 1
4 2

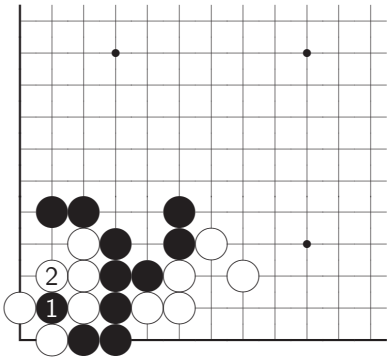

5
3 2
6 1
4

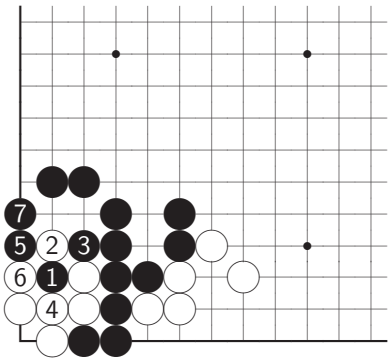

6
3 2
5 1
4

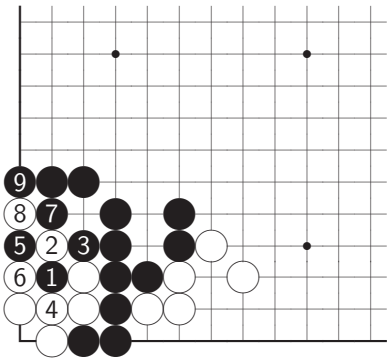

5
2 3
1 4

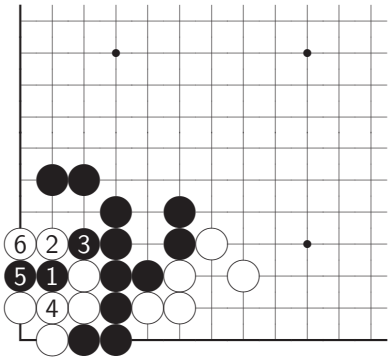

2 4
1 3

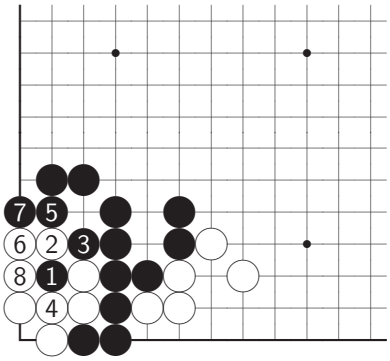

1
3 2
4

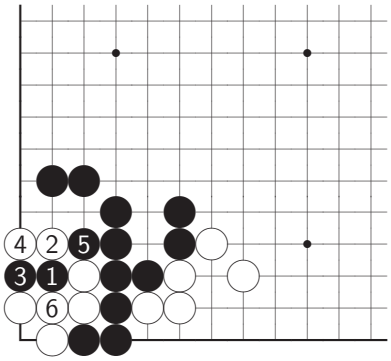

2
1

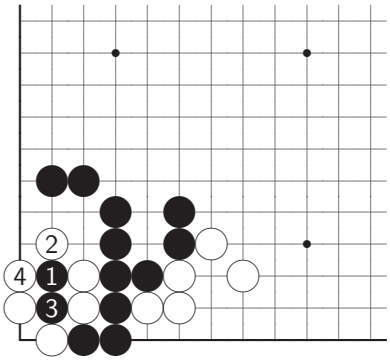

7
5 2 3
6 1
4

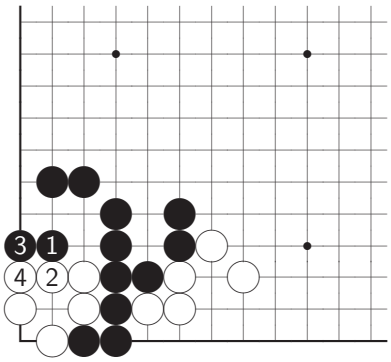

9
8 7
5 2 3
6 1
4

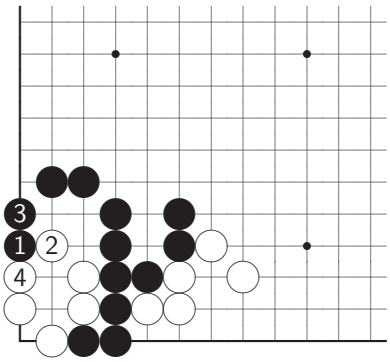

6 2 3
5 1
4

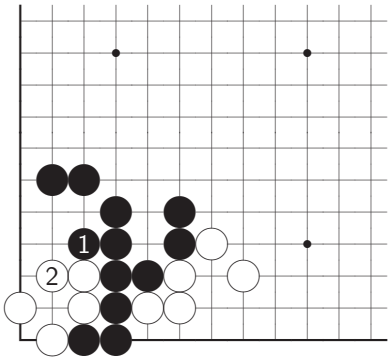

7 5
6 2 3
8 1
4

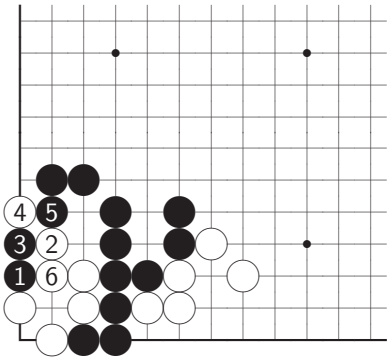

4 2 5
3 1
6

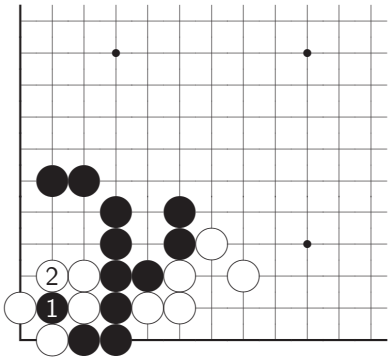

2
4 1
3

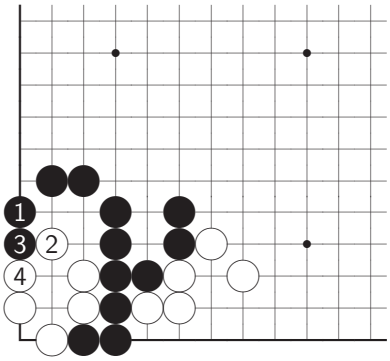

3 1
4 2

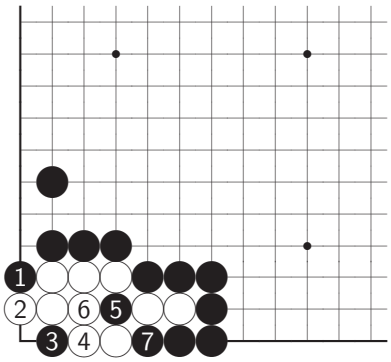

3
1 2
4

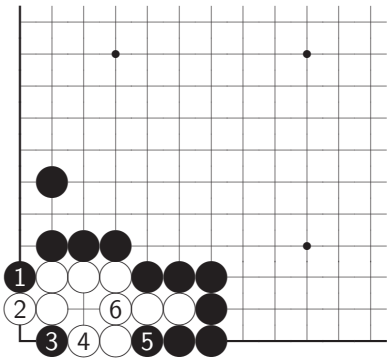

1
2

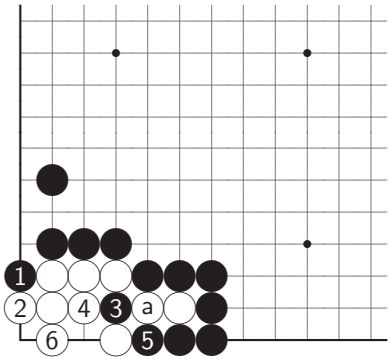

4 5
3 2
1 6

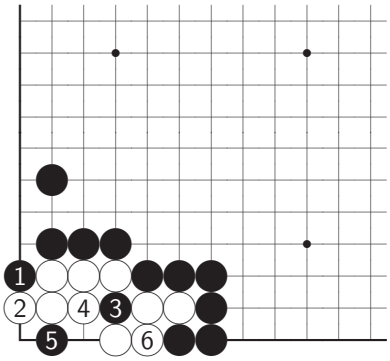

2
1

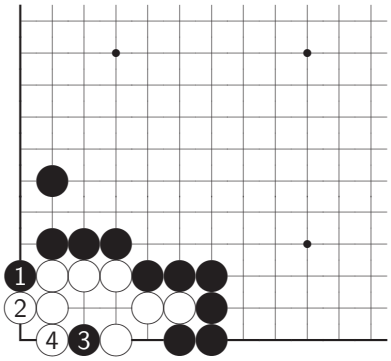

1
3 2
4

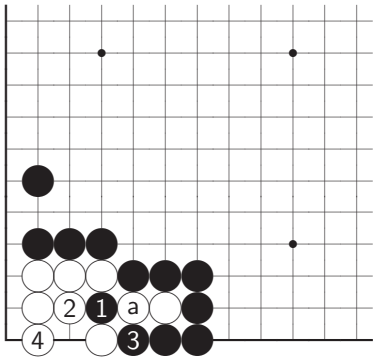

1
2 6 5
3 4 7

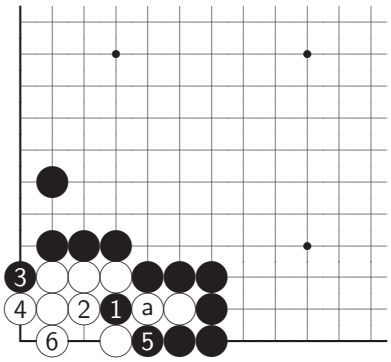

1
2 6
3 4 5

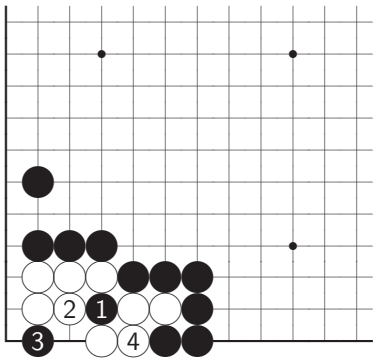

1
2
4
3
a
6
5

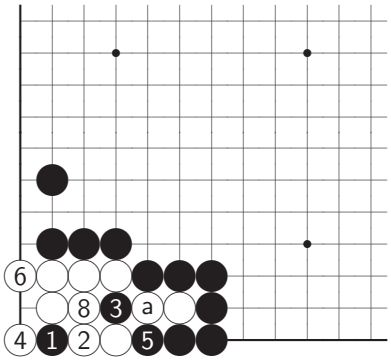

1
2
4
3
5
6

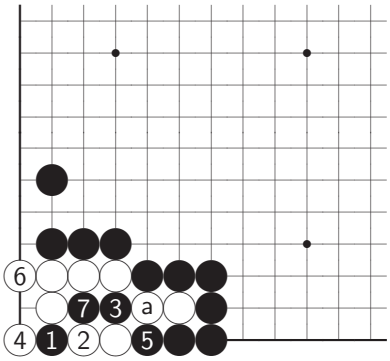

1
2
4
3

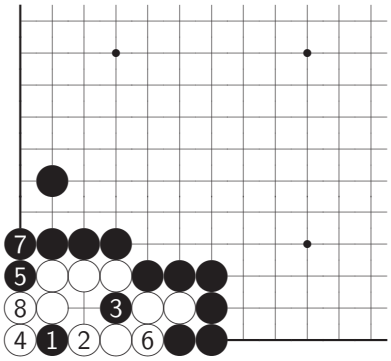

2
1
a
4
3

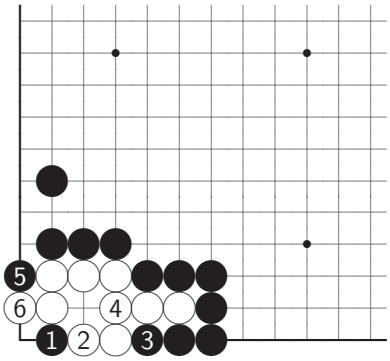

3
4
2
1
a
6
5

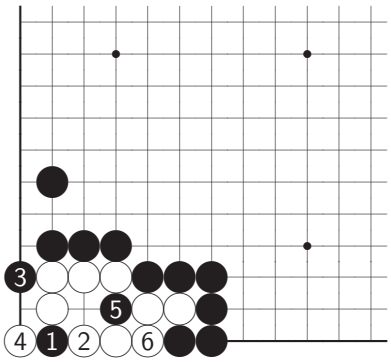

2
1
3
4

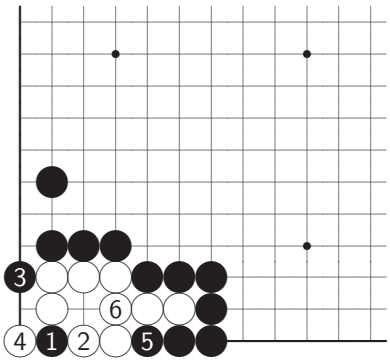

6
8 3 a
4 1 2 5

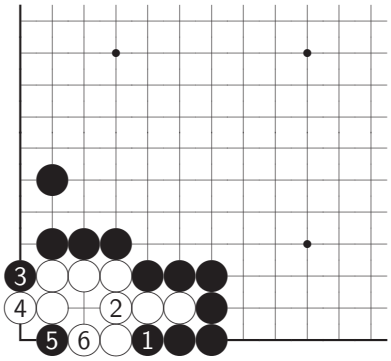

6
7 3 a
4 1 2 5

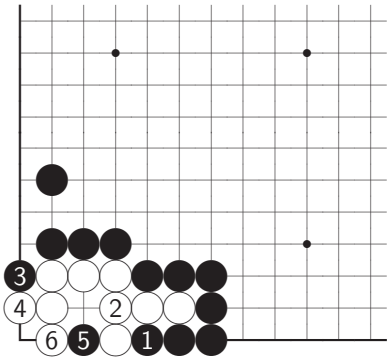

7
5
8 3
4 1 2 6

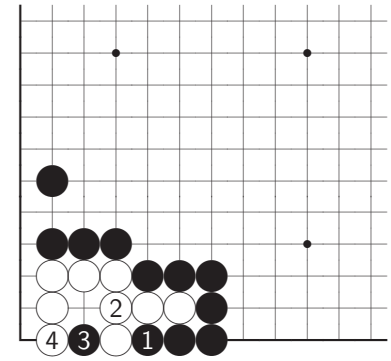

5
6 4
1 2 3

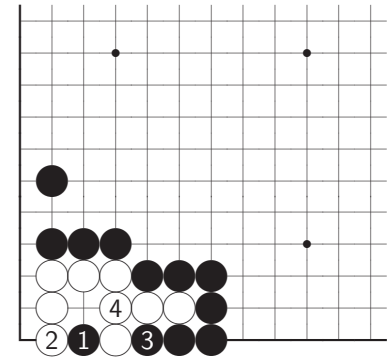

3
5
4 1 2 6

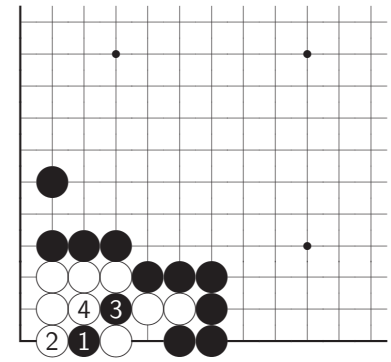

3
6
4 1 2 5

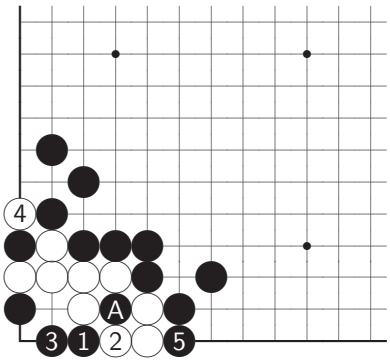

3
4
2
5 6 1

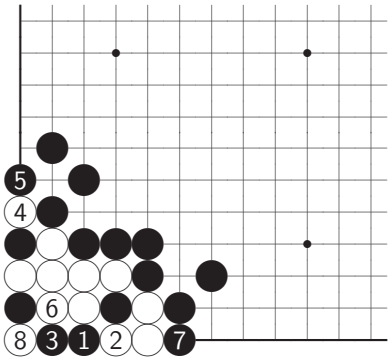

3
4
2
6 5 1

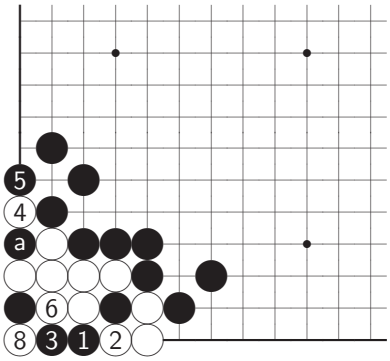

2
4 3 1

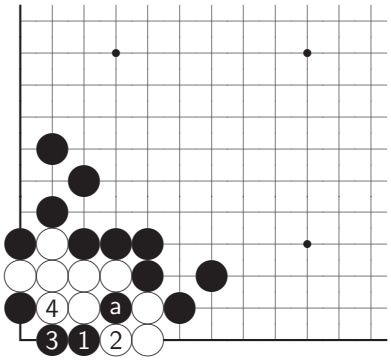

4
2 1 3

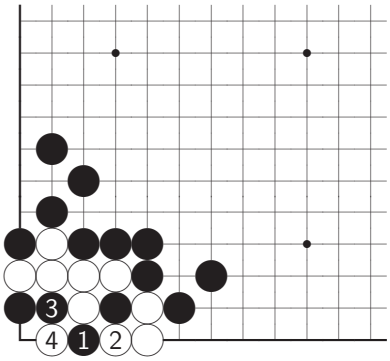

4 3
2 1

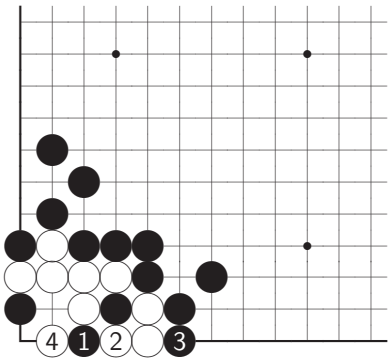

4
A
3 1 2 5

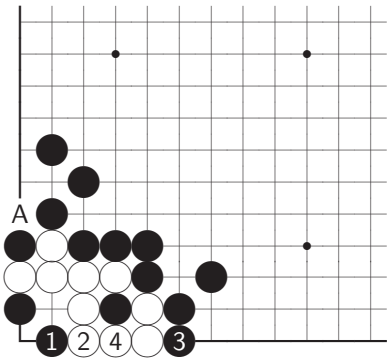

5
4
6
8 3 1 2 7

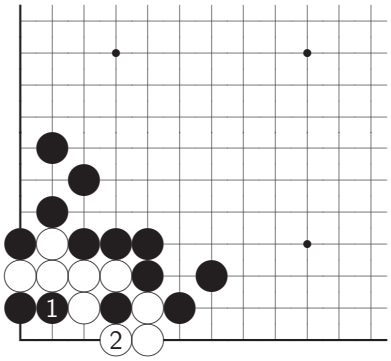

5
4
a
6
8 3 1 2

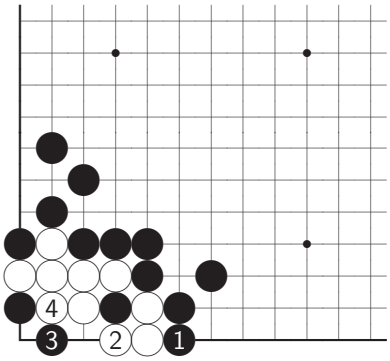

4 a
3 1 2

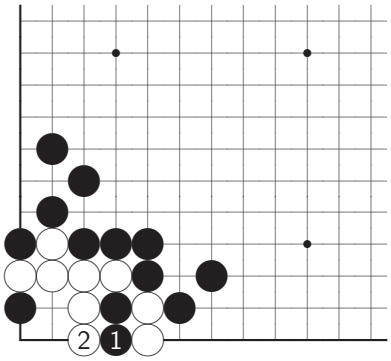

3
4 1 2

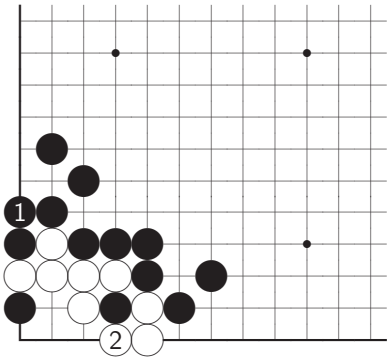

4 1 2 3

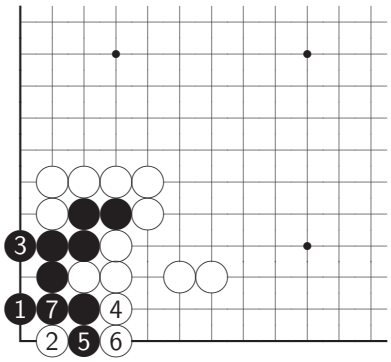

A
1 2 4 3

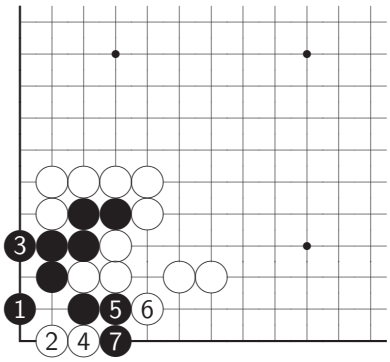

1
2

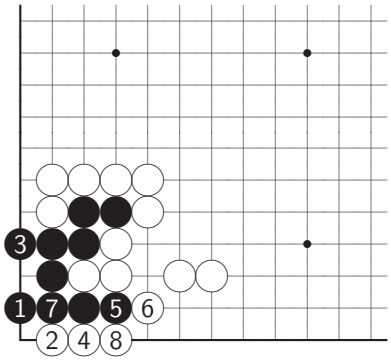

4
3
2
1

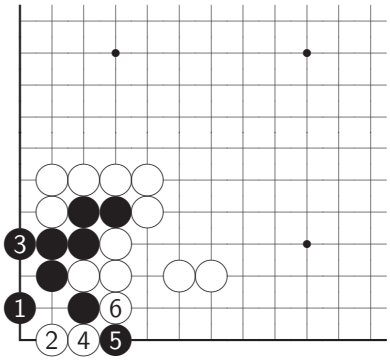

2
1

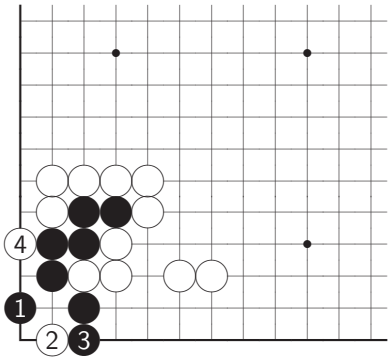

1
2

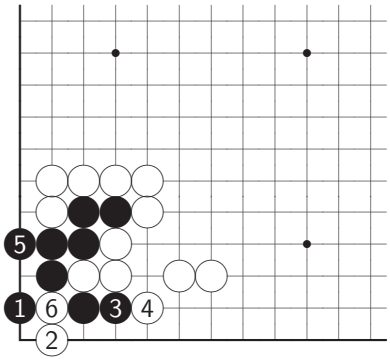

3
1
7
4
2
5
6

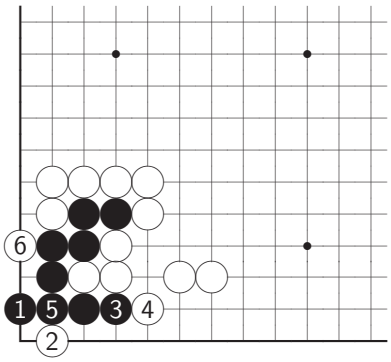

3
1
5
6
2
4
7

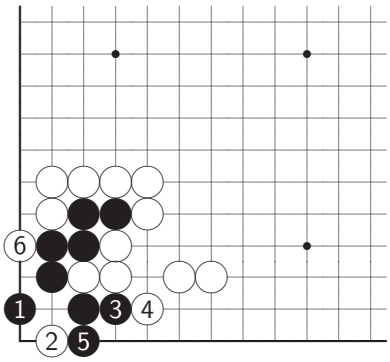

3
1 7 5 6
2 4 8

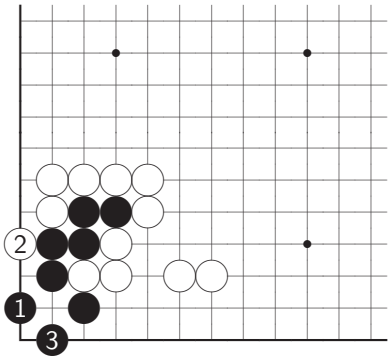

3
1 6
2 4 5

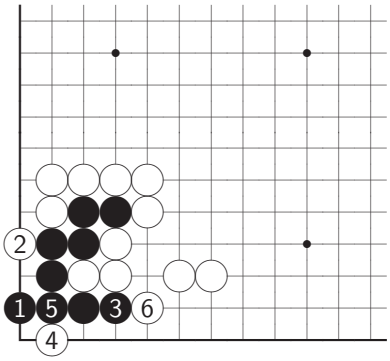

4
1
2 3

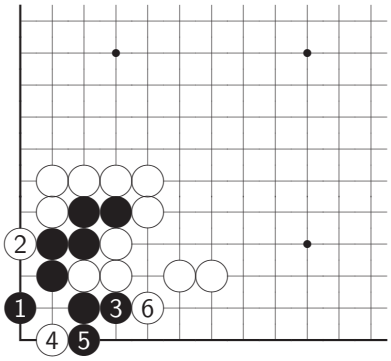

5
1 6 3 4
2

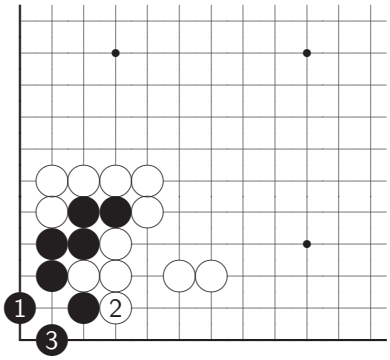

6
1 5 3 4
2

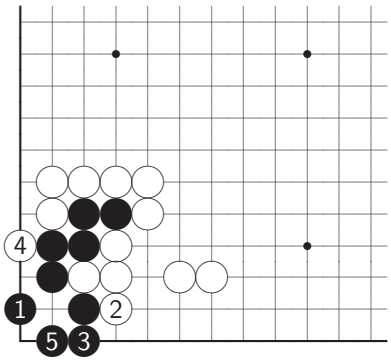

6
1 3 4
2 5

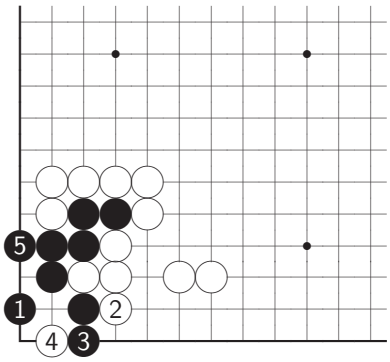

2
1
3

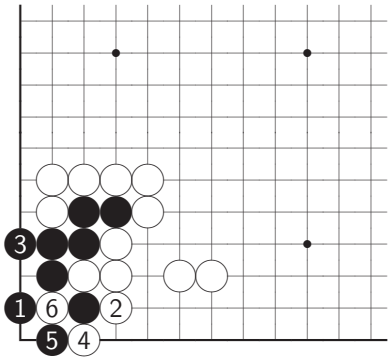

2
1
5
3
6
4

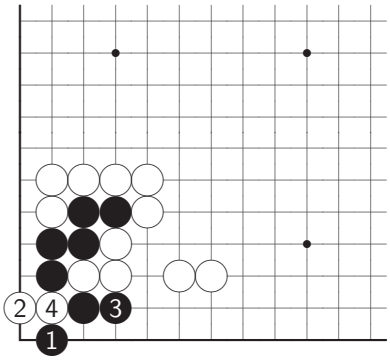

2
1
3
6
4
5

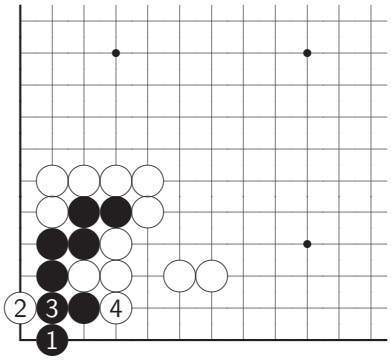

1
2
3

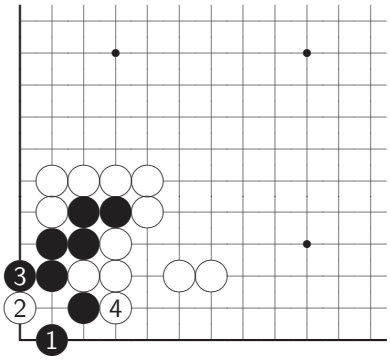

4
1
2
5
3

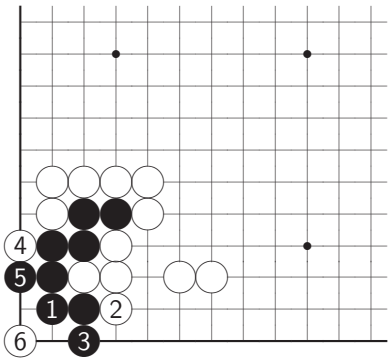

5
1
2
4
3

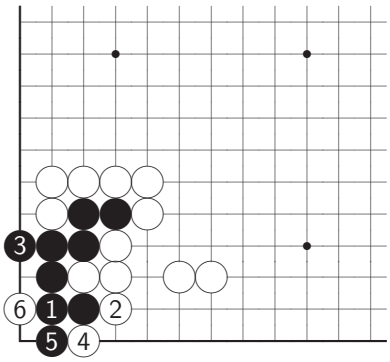

3
1 6 2
5 4

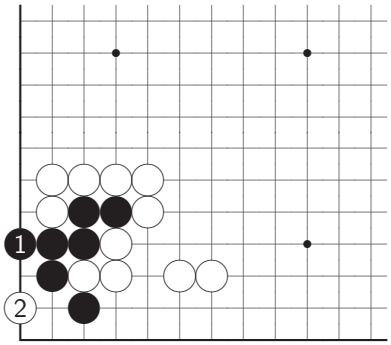

2 4 3
1

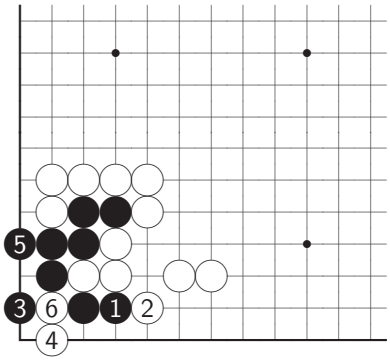

2 3 4
1

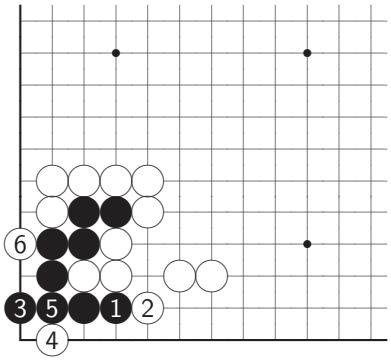

3
2 4
1

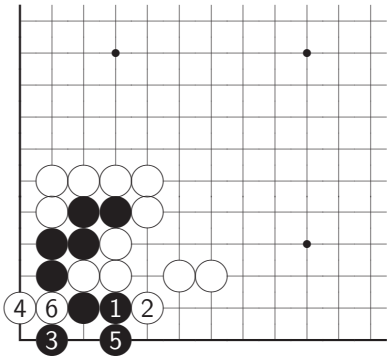

4
5
1 2
6 3

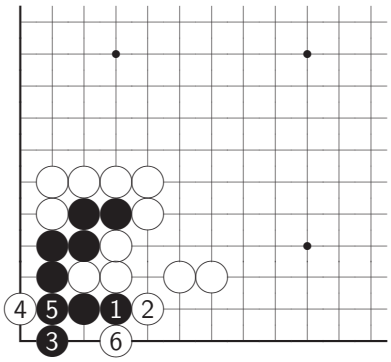

3
6 1 2
5 4

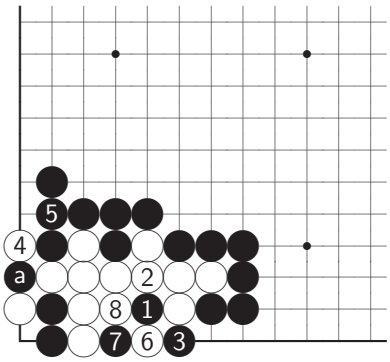

1
2

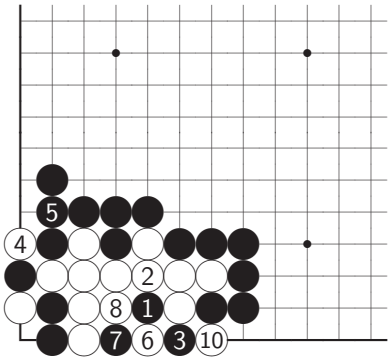

5
3 6 1 2
4

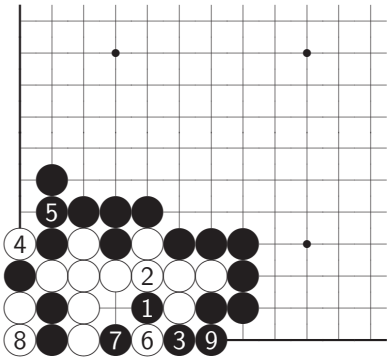

6
3 5 1 2
4

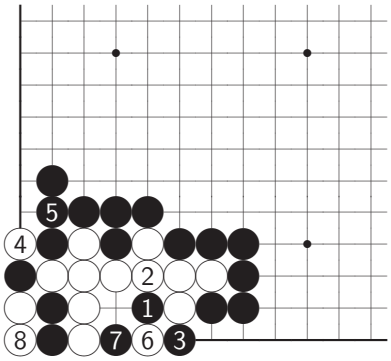

4 6 1 2
3 5

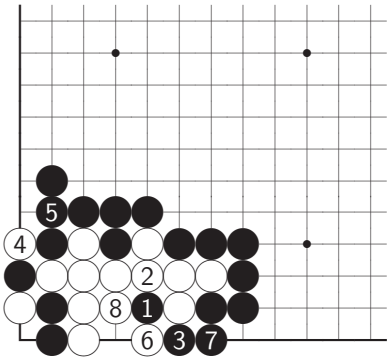

4 5 1 2
3 6

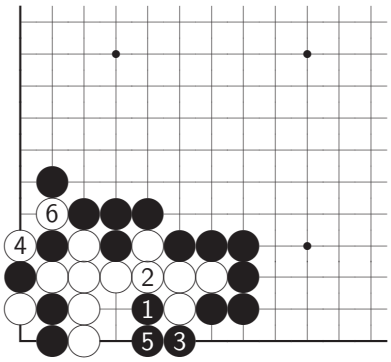

5
4
a 2
8 1
7 6 3

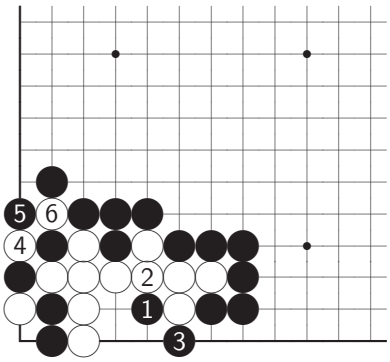

5
4
2
8 1
7 6 3 10

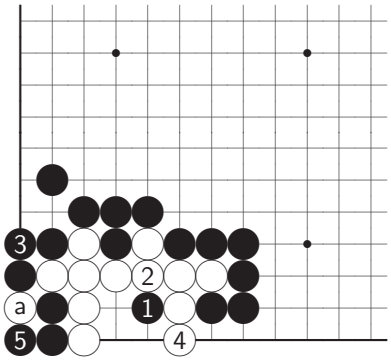

5
4
2
1
8 7 6 3 9

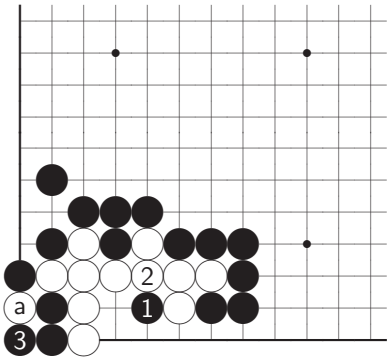

5
4
2
1
8 7 6 3

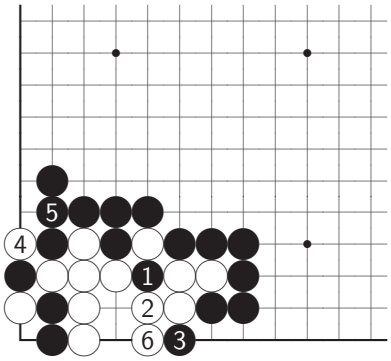

5
4
2
8 1
6 3 7

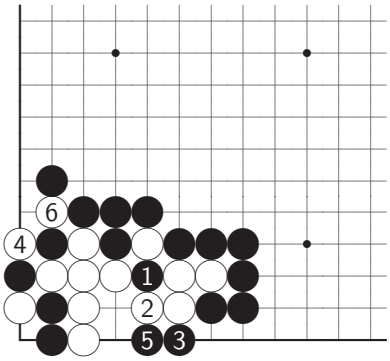

6
4
2
1
5 3

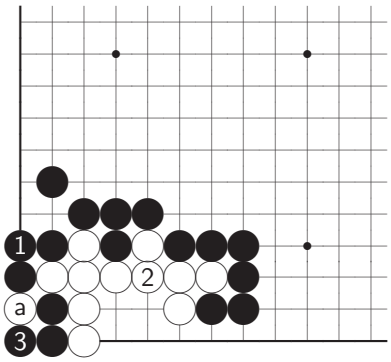

5 6
4
2
1
3

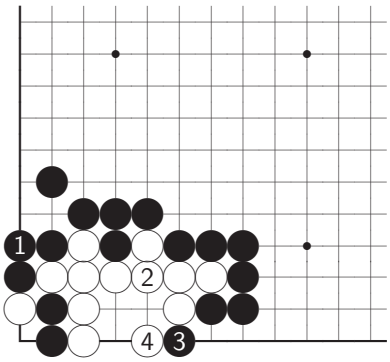

3
2
a
1
5
4

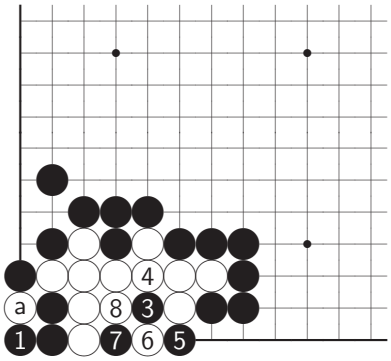

2
a
1
3

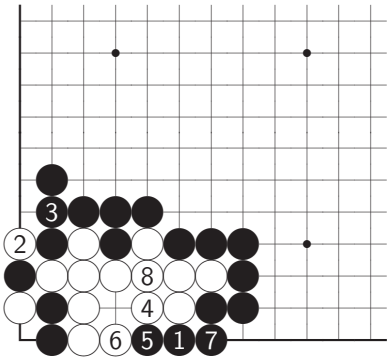

5
4
1
2
6
3

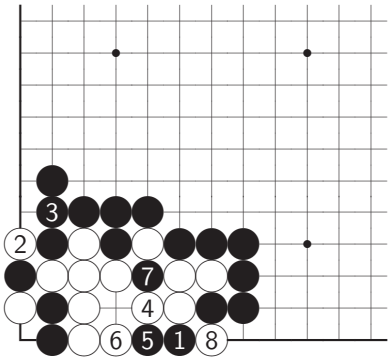

6
4
1
2
5
3

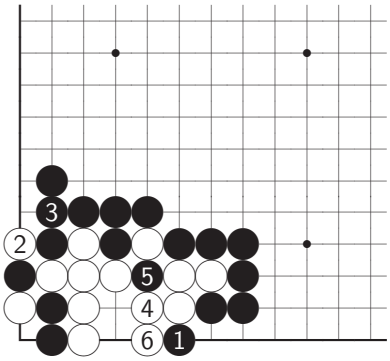

1
2
a
3

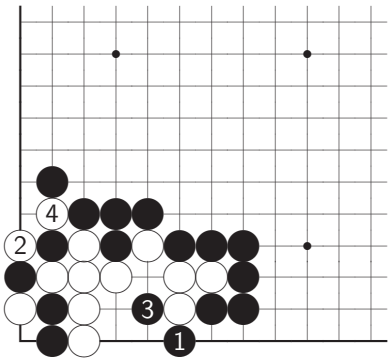

1
2
4
3

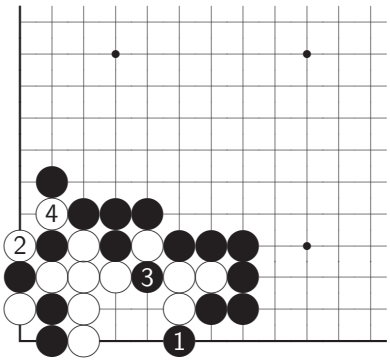

4
a
8
3
1
7
6
5

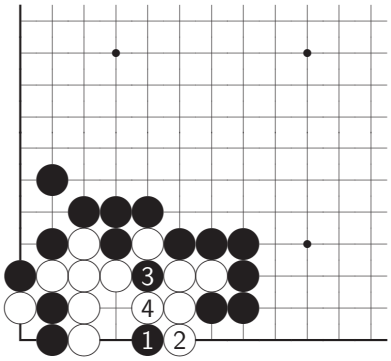

3
2
8
4
6
5
1
7

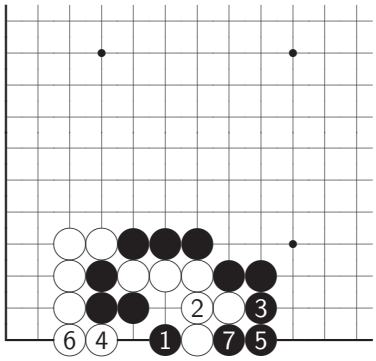

3
2
7
4
6
5
1
8

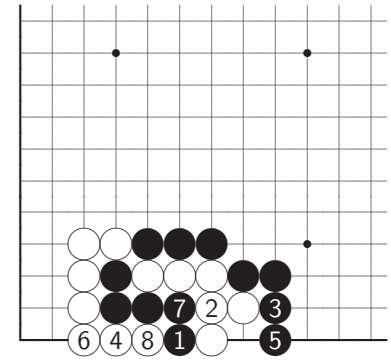

3
2
5
4
6
1

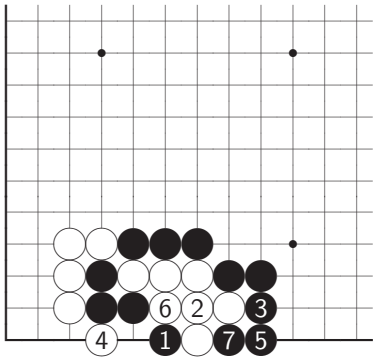

4
2
3
1

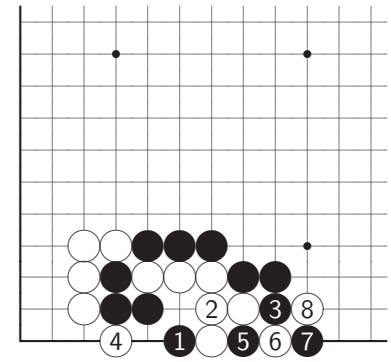

4
2
3
1

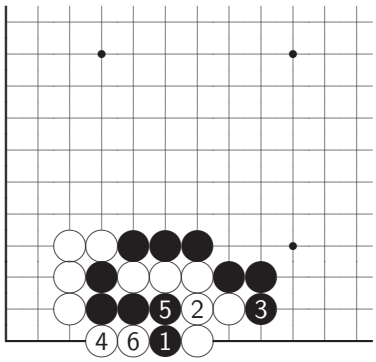

3
4
1 2

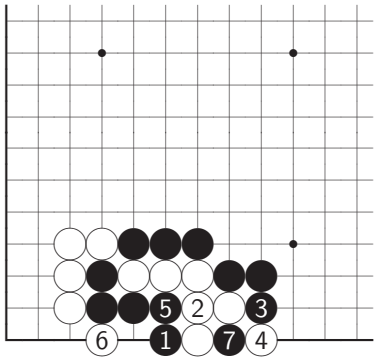

2 3
6 4 1 7 5

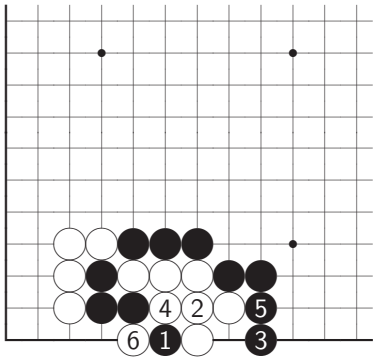

7 2 3
6 4 8 1 5

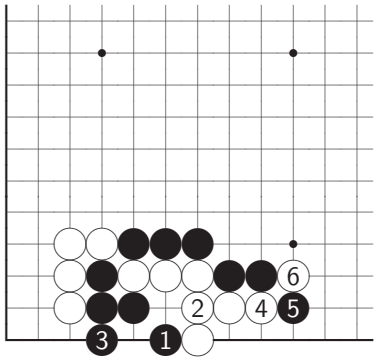

6 2 3
4 1 7 5

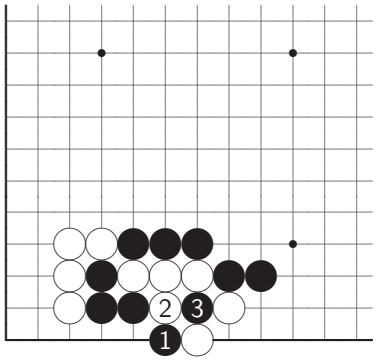

2 3 8
4 1 5 6 7

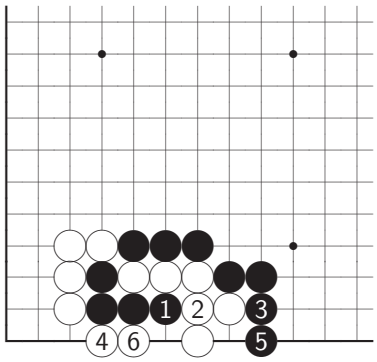

5 2 3
4 6 1

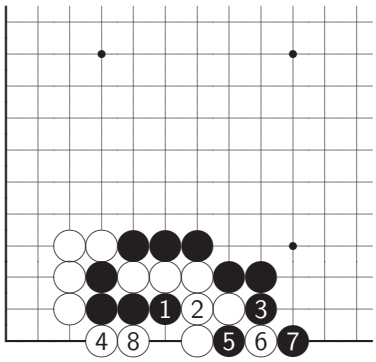

5 2 3
6 1 7 4

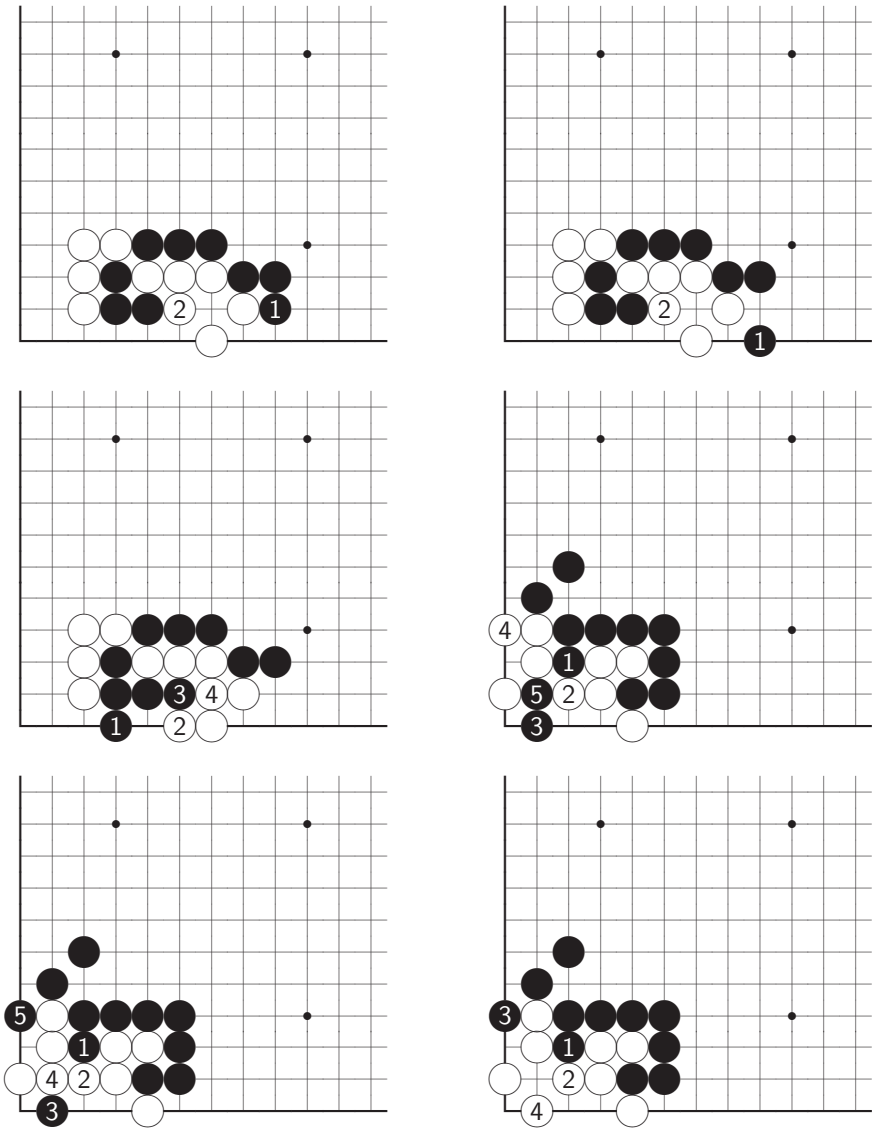

4 2 5
6 1 3

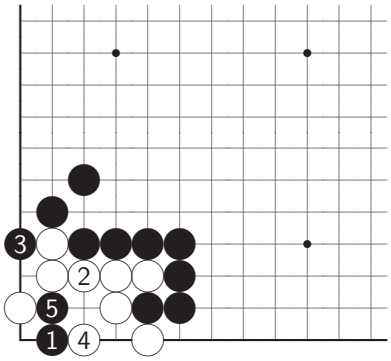

6
2 4 5
3 1

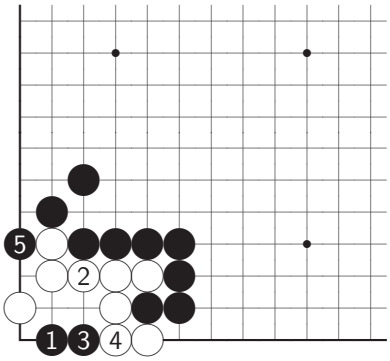

2 3
1

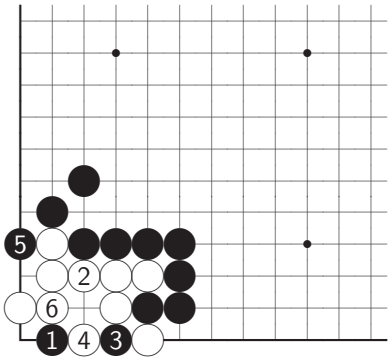

1 2 3
4 6 5

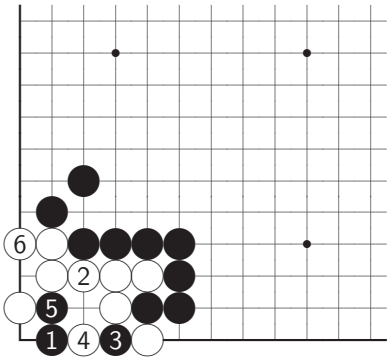

1 2 3
4 8 5 6 7

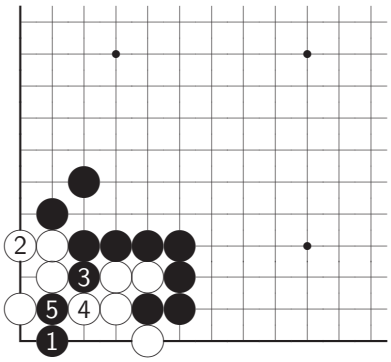

2
1
2
1
3
4
1
2
4
1
5
2
3
5
1
4
2
3
3
1
2
4

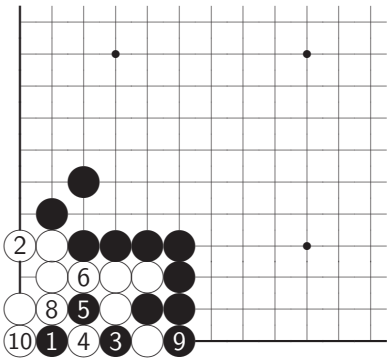

3
2
5
1 4

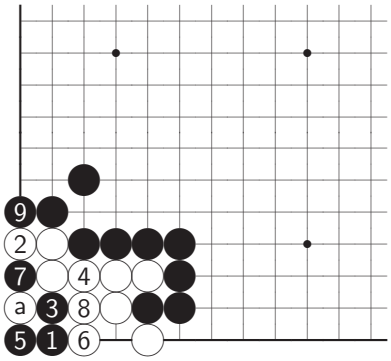

5
2
1 3 4

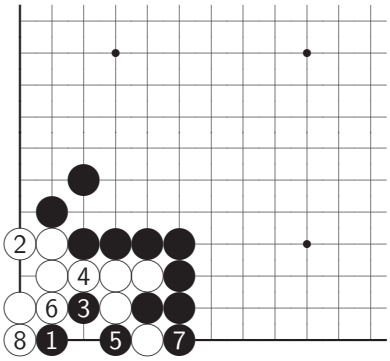

5
2
6
1 4 3

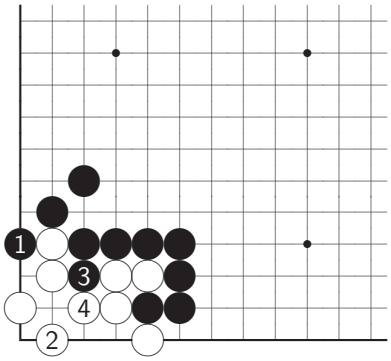

6
2
5
1 4 3

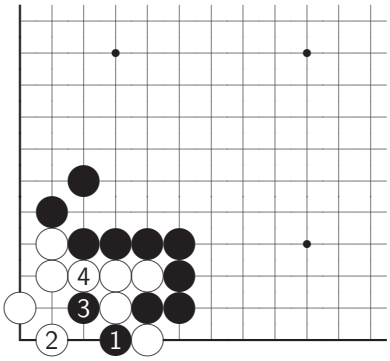

2
3
5 4
1

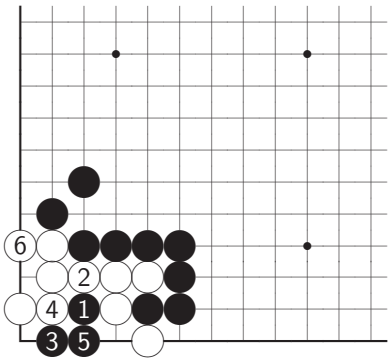

2
6
8 5
10 1 4 3 9

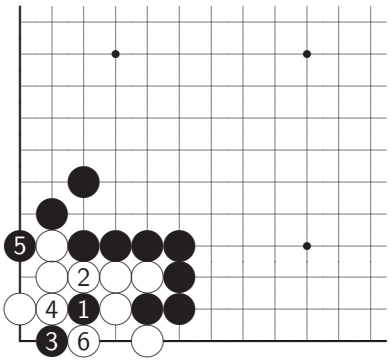

9
2
7
4
a
3
8
5
1
6

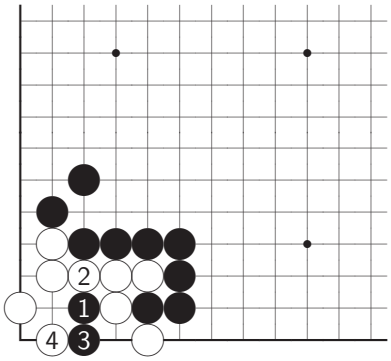

2
4
6
3
8
1
5
7

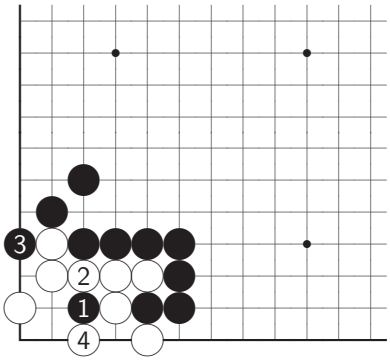

1
3
4
2

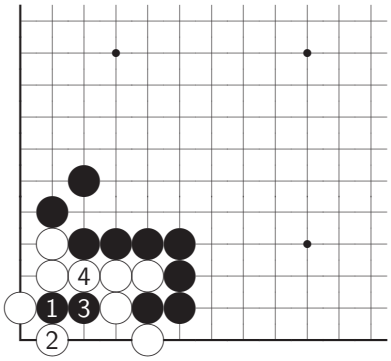

4
3
2
1

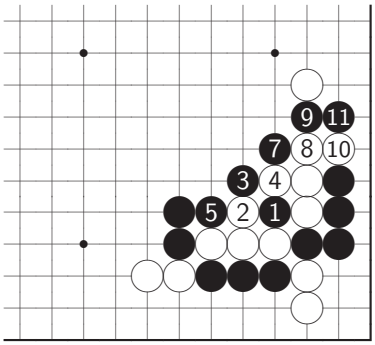

6
2
4
1
3
5

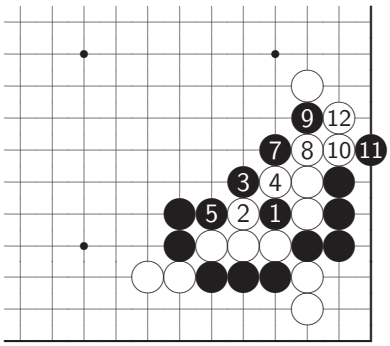

5
2
4
1
3
6

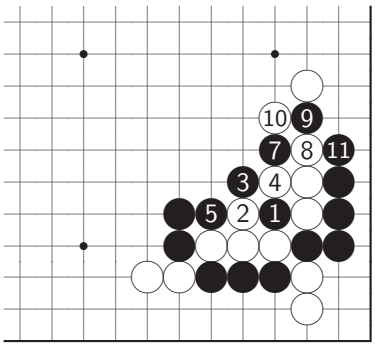

2
1
4 3

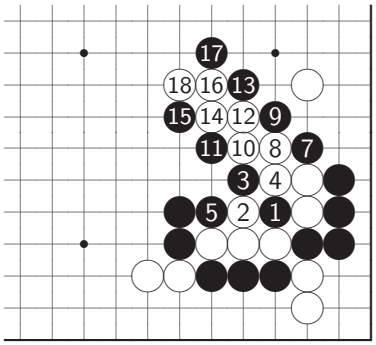

3
2
1
4

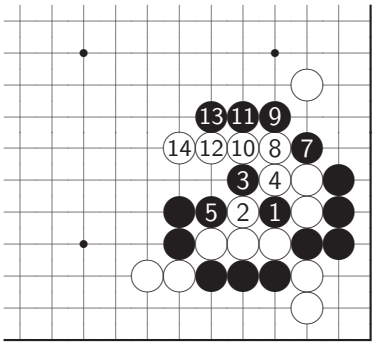

4
1 3
2

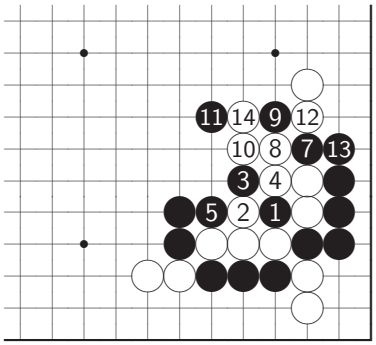

9 11
7 8 10
3 4
5 2 1

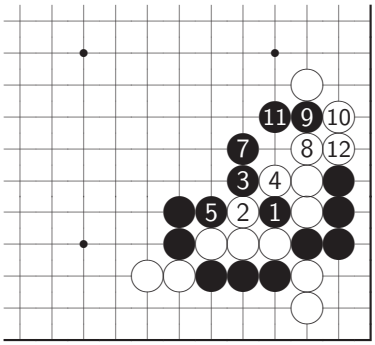

9 12
7 8 10 11
3 4
5 2 1

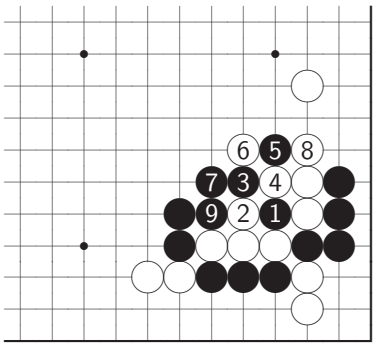

10 9
7 8 11
3 4
5 2 1

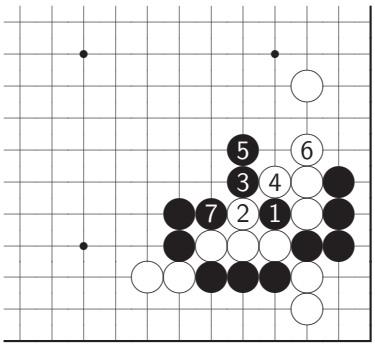

17
18 16 13
15 14 12 9
11 10 8 7
3 4
5 2 1

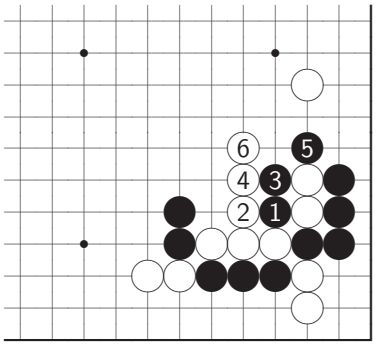

13 11 9
14 12 10 8 7
3 4
5 2 1

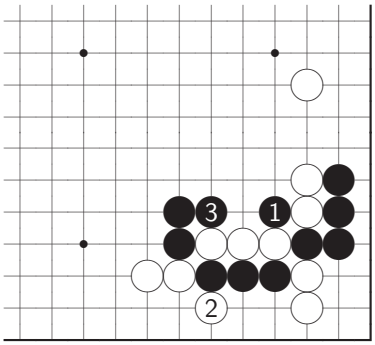

11 14 9 12
10 8 7 13
3 4
5 2 1

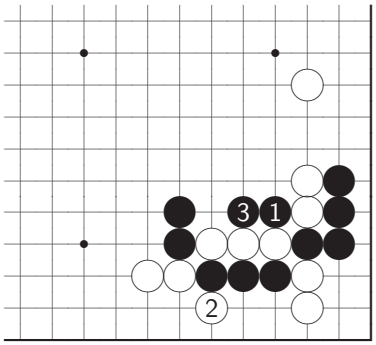

11 9 10
7 8 12
3 4
5 2 1

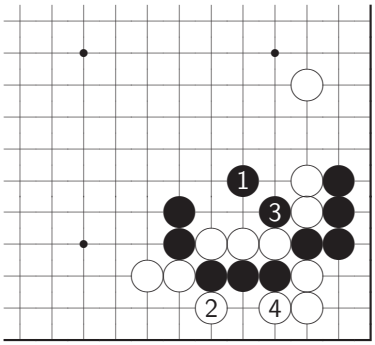

6 5 8
7 3 4
9 2 1

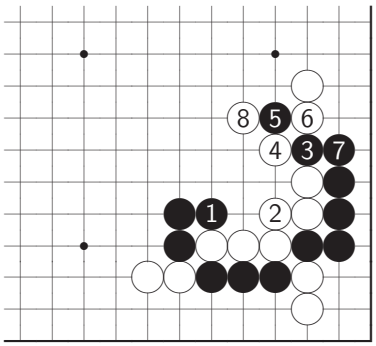

5 6
3 4
7 2 1

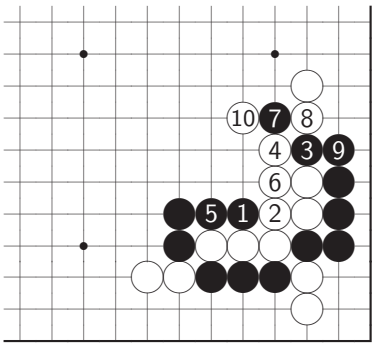

6
5
4
3
2
1

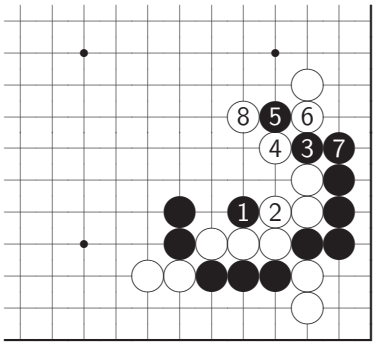

3
1
2

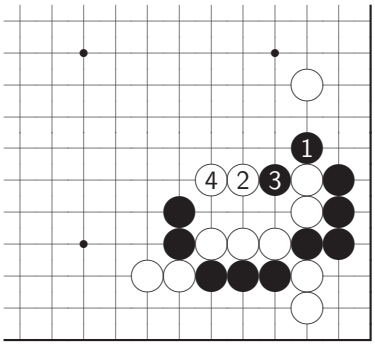

3
1
2

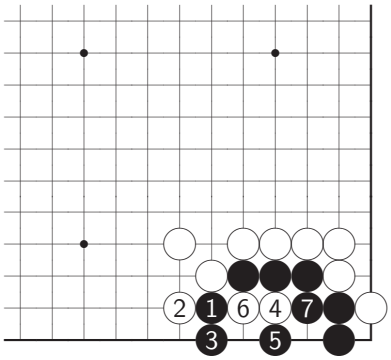

1
3
2
4

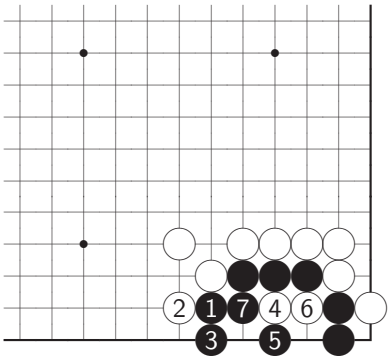

8
5
6
4
3
7
1
2

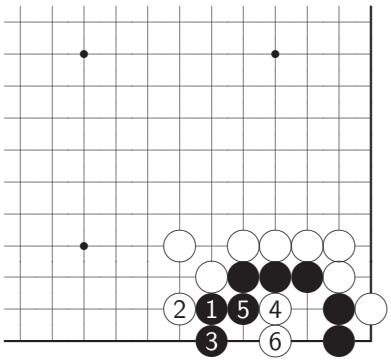

10
7
8
4
3
9
6
5
1
2

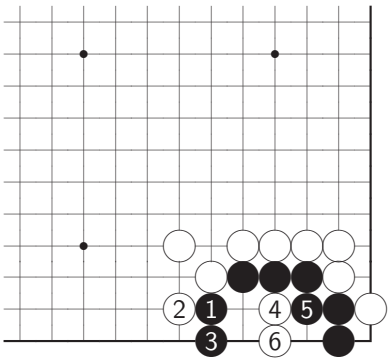

8 5 6
4 3 7
1 2

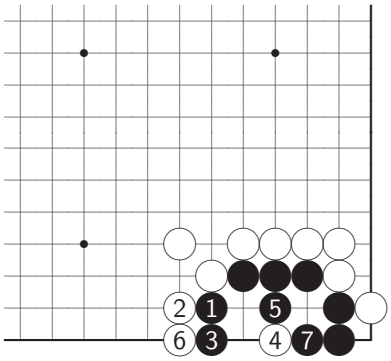

1
4 2 3

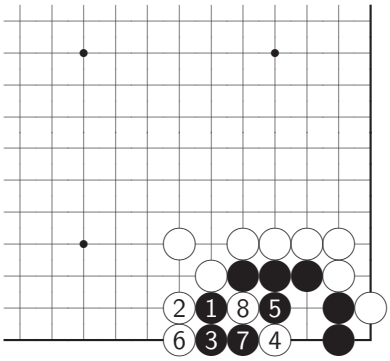

2 1 6 4 7
3 5

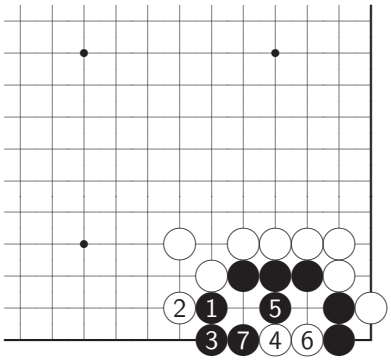

2 1 7 4 6
3 5

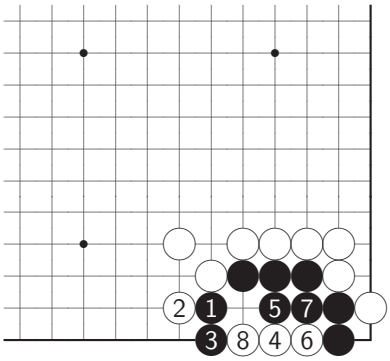

2 1 5 4
3 6

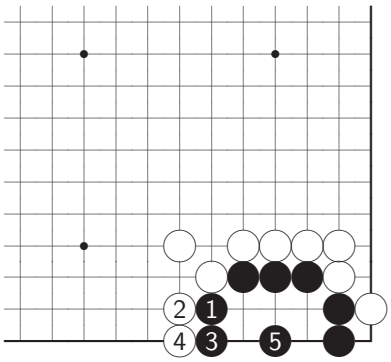

2 1 4 5
3 6

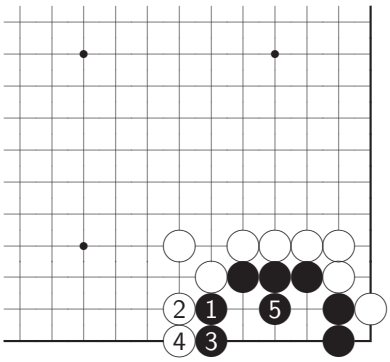

2 1 5
6 3 4 7

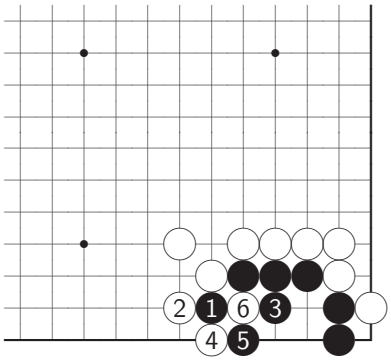

2 1 8 5
6 3 7 4

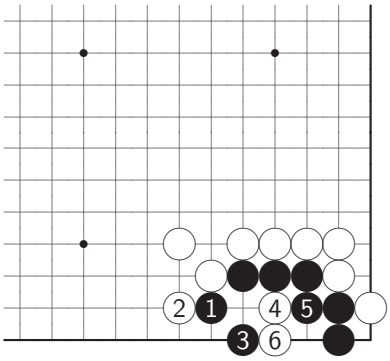

2 1 5
3 7 4 6

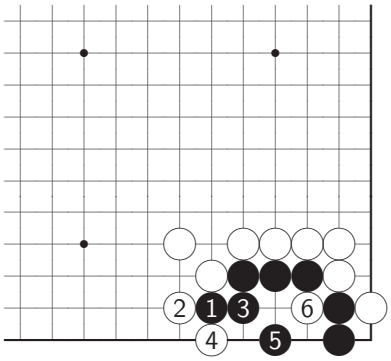

2 1 5 7
3 8 4 6

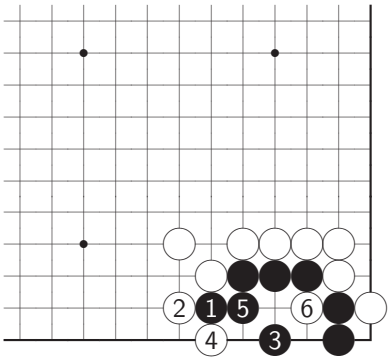

2 1
4 3 5

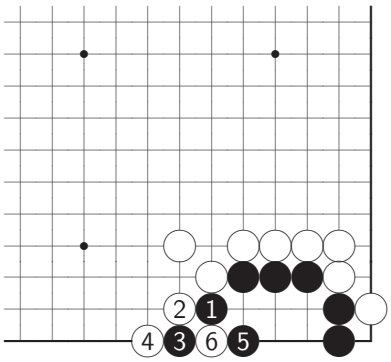

2 1 5
4 3

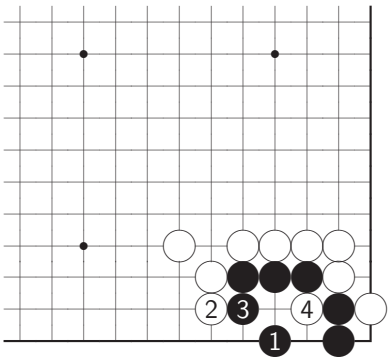

2 1 6 3
4 5

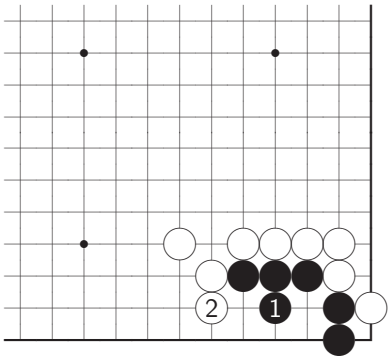

2 1 4 5
3 6

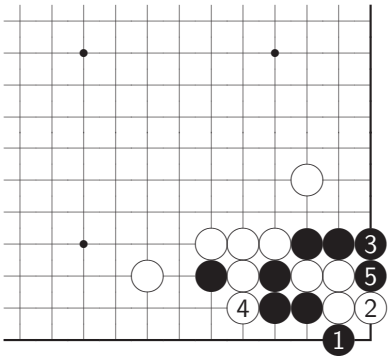

2 1 3 6
4 5

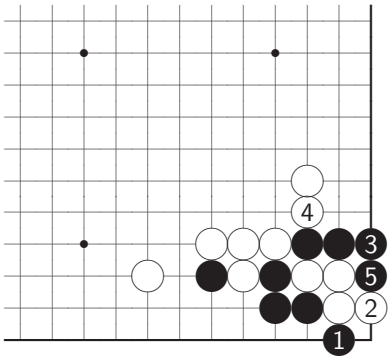

2 1 5 6
4 3

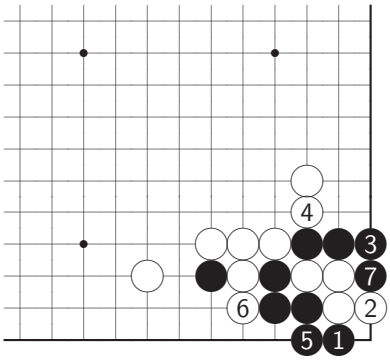

2 1
4 3 6 5

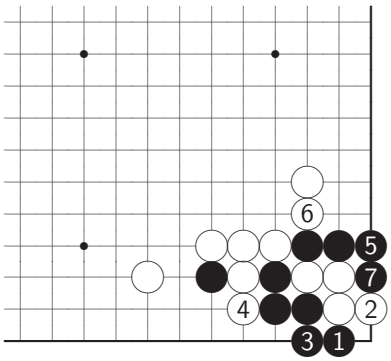

2 3 4
1

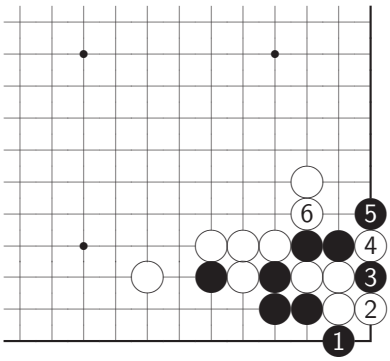

2
1

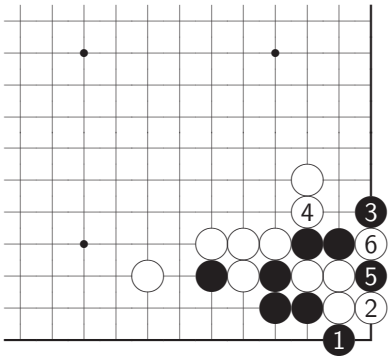

3
5
4
2
1

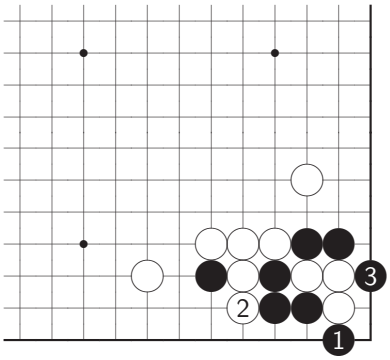

4
3
5
2
1

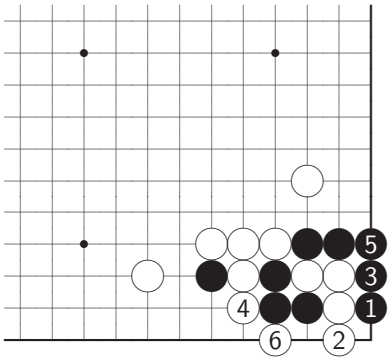

4
3
7
6
2
5
1

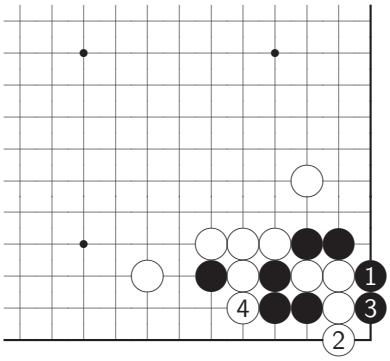

6
5
7
4
2
3
1

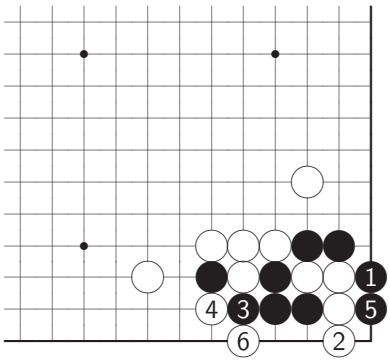

6
5
4
3
2
1

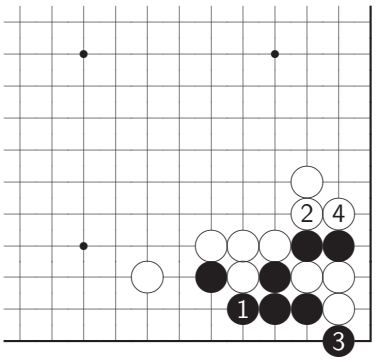

4
3
6
5
2
1

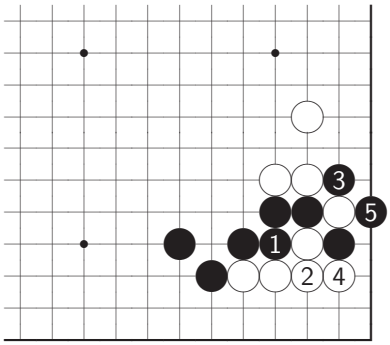

3
2
1

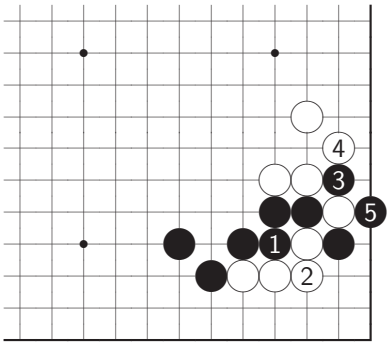

5
3
4
1
6
2

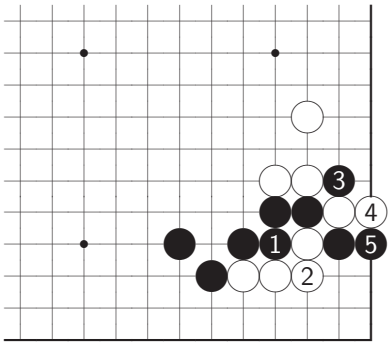

1
4
3
2

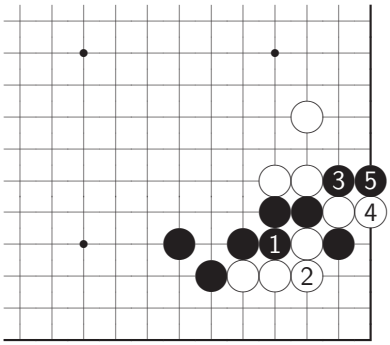

1
4
3
5
6
2

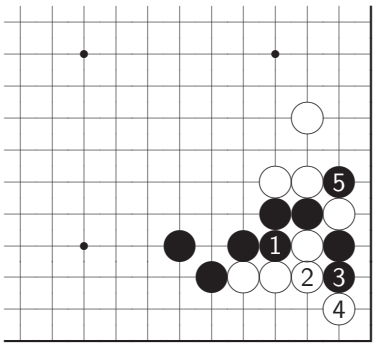

2
4
1
3

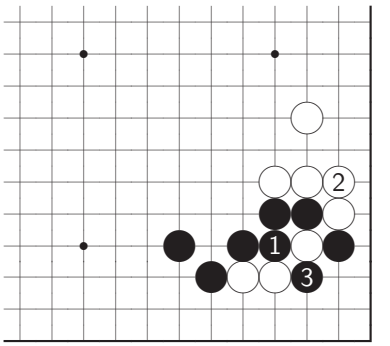

3
5
1
2
4

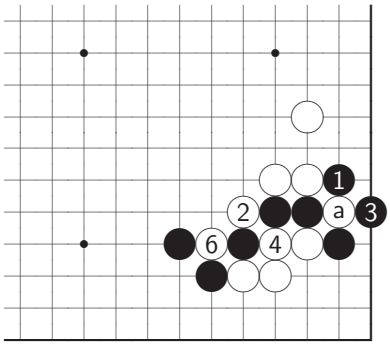

4
3
5
1
2

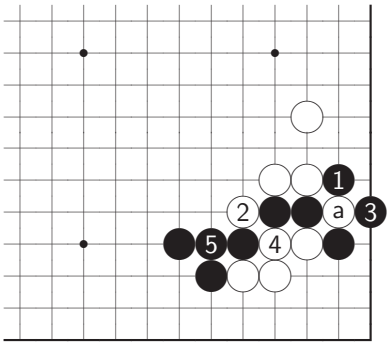

3
4
1
5
2

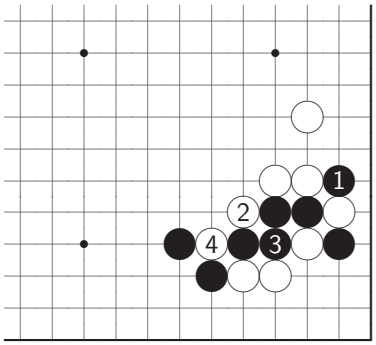

3
5
4
1
2

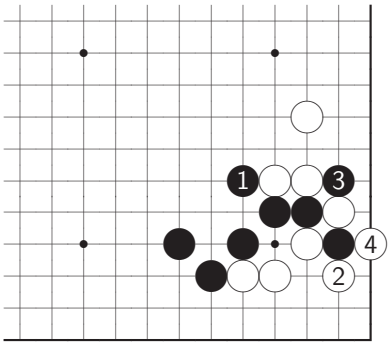

5
1
2
3
4

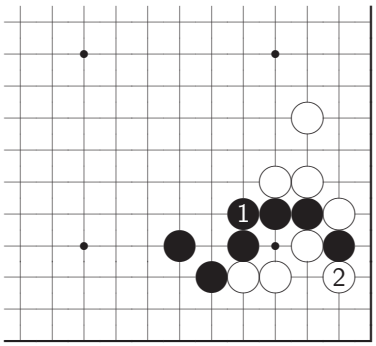

2
1
3

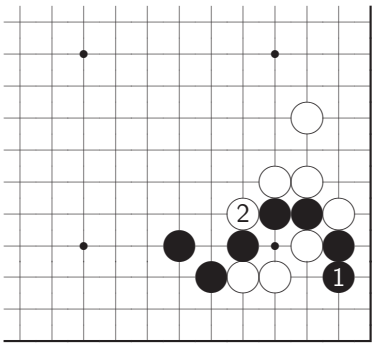

1
2
a
3
6
4

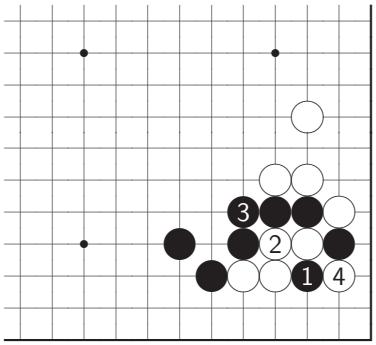

1
2
a
3
5
4


1
2
4
3


1
3
4
2


1
2


2
1


3
2
1
4