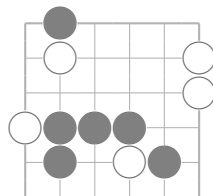


6×6-Board Renju Problems - 2



Black to play and win

MANO Yoshihisa

Tokai Renju Association in Japan

6×6-Board Renju Problems - 2

Copyright © 2013 MANO Yoshihisa
(ysmano@gmail.com)

Tokai Renju Association in Japan
First Printing, February 2013

Terms and Notation

4-move : to make a Four.

3-move : to make a Three.

4-3 : Four-Three, a fork consisting of one Four and one Three.

3-3 : double-Three, a fork consisting of two Threes. Forbidden for Black.

4-4 : double-Four, a fork consisting of two Fours. Forbidden for Black.

Overline : an unbroken row consisting of six or more stones of the same color. Forbidden for Black, but one of winning patterns for White.

Threat : Three, Four, Mise-move, or Fukumi-move.

Mise-move : a move which threatens to make 4-3.

Fukumi-move : a move which threatens to play VCF.

VCF : Victory by Continuous Fours.

VCT : Victory by Continuous Threats.

double-Mise-move : a move which threatens to make two kinds of 4-3.

Nori-move : a move which may be able to block opponent's VCF, VCT or Threat by making a counter-Threat.

(A;B;C;...) : Continuous Fours. Defense moves are omitted.

<A→B> : Attacker plays A first and B next, wherever his opponent defends against A. A is a Threat except Four, and B is a final winning pattern such as 4-3. The form of B may be 'C or D', '(C;D;...)' or the combination. For example, "Black wins by <3→A or (B;C)>".

A/B : A instead of B. For example, "C/3 is met by White d". It means that "C instead of 3 results in failure by White strong defense d".

6×6-Board Renju Problems - 2

Contents

1	On 6×6-Board Renju Problems	(2)
2	Elementary Level VCT Problems	(3)
3	Middle Level VCT Problems	(21)
4	Advanced Level VCT Problems	(45)
5	VCF Problems	(55)

The Web site of Tokai Renju Association has some pages on Renju problems, where one can enjoy solving them interactively. One of those pages is on 6×6-board Renju problems[2].

This booklet is a translation of a half of [4] in References. All problems in this booklet and [4] are found in the Web site.

1 On 6×6-Board Renju Problems

15×15-boards are used in Renju games. The boards are also used in Renju problems, of course. 6×6-board Renju problems use 6×6-board as the name shows. They are considered as intelligent games or intelligent puzzles based on the Renju rule.

The rule of 6×6-board Renju problems is weakened by removing some of real game elements. For example, the condition on numbers of Black and White stones are not required. It is possible that no defensive stones are on a board. It is impossible that a Black stone is at a center of the board (6×6-board has not a center).

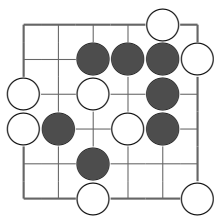
Since non-meaningless Renju problems require at least 6 in length and in width, 6×6-boards are minimum. Although the board is very small, many good offensive and defensive tactics found in normal Renju games can be also found in 6x6-board problems. We can say that those problems are suitable for learning and enjoying such tactics in the condensed form. Furthermore, by using small boards we get such merit as good training for complete looking-ahead or calculation about all variations. Those problems, however, occasionally require a little different sense from that of normal Renju, so it is also a good idea that one enjoys them comfortably as intelligent puzzles of a joyful field in the large world of Renju.

The rule of Renju problems says the defenders must select his moves so that the sequence becomes longer. It is also true on 6×6-board problems. But the case of trapping Black into forbidden moves is treated as exception of the rule in this booklet for simplifying the solution.

The problems shown in the Web page are classified into two parts, VCT problems and VCF problems. VCT problems are classified again into three levels, that is, elementary, middle and advanced levels. The same classification is used in this booklet.

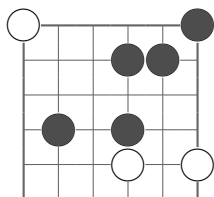
Although the author has paid full attention when making and analysing problems, there may be some problems which have extra or no winning sequences. Moreover, there may be imperfect or unsuitable description. If you find such faults, please inform the author. Thank you in advance.

2 Elementary Level VCT Problems



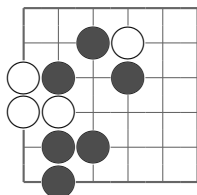
[A01_(c050)]¹ Black to play and win.

Hint: The shape is almost symmetric. Although the first move seems clear, you must consider strong defenses carefully.



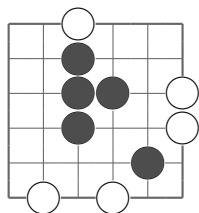
[A02_(c103)] Black to play and win.

Hint: White Nori-move is effective to some incorrect sequences of moves.



[A03_(c161)] Black to play and win.

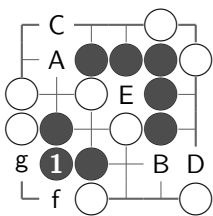
Hint: An exercise for jumping to make broken Threes.



[A04_(c249)] Black to play and win.

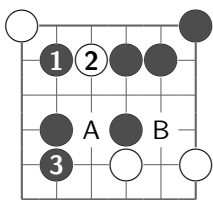
Hint: My real aim is there.

¹ The mark 'cxxx' in brackets is the problem identifier used in Web site.



[A01 Ans] Black wins by $\langle 1 \rightarrow A \text{ or } B \text{ or } (A;C;E) \text{ or } (B;D;E) \rangle$.

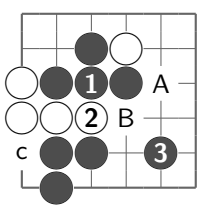
As is said “A good move is in the middle if symmetric”, double-Mise-move 1 is good. White f and g defend against double-Mise-move, but there remains VCF for each defense.



[A02 Ans] Black wins by $\langle 3 \rightarrow (A(;B)) \rangle^2$.

- if 2 elsewhere³, Black wins by $\langle 3 \rightarrow A \rangle$ ($\langle A \rightarrow 3 \rangle$ is also possible)

Both A/1 and A/3 are met by White B.⁴

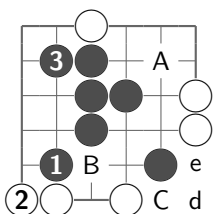


[A03 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

White 4-move against 3 is ineffective⁵. Black 4-move A before 3 needs one more Black move.

- if 2 elsewhere, Black wins at 2

3/1 is met by White c.



[A04 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

- if 2 elsewhere, Black wins at B

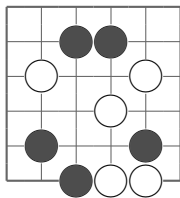
3/1 is met by White d and C/3 by e.

² If one or more extra 4-moves are necessary depending on defenses, the VCF sequence is represented using nested parentheses like $\langle (A;B(;C)) \rangle$.

³ The description on variations assumes White will block Three and Mise-move. If White does not block them, Black makes open Four or 4-3, of course.

⁴ Paragraph following ‘#’ is some annotation on the attacker failure moves.

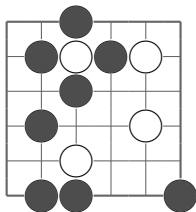
⁵ ‘Ineffective 4-move’ means the defense 4-move, which makes new attacker’s Threat and makes impossible to defend against both existing and new Threats at the same time.



[A05_(m3a)] Black to play and win.

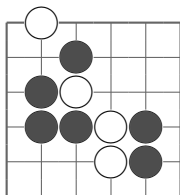
Note that stones form the shape of '3'.

Hint: There are some VCT candidates, but only one reaches to winning 4-3.



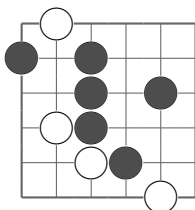
[A06_(c099)] Black to play and win.

Hint: Although immediate VCF is impossible, VCF after one Black move is possible in spite of strong defenses.



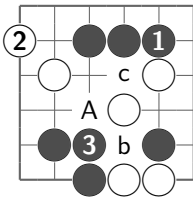
[A07_(c058)] Black to play and win.

Hint: Guess the 4-3 spot, and go on toward that spot correctly.



[A08_(c227)] Black to play and win.

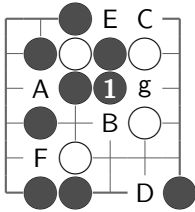
Hint: There might be Nori-move, but ...



[A05 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

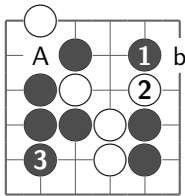
- same wherever 2

3/1 is met by White b, and next 1 by White 4-move A. A/3 is met by White c.



[A06 Ans] Black wins by $\langle 1 \rightarrow A$ or B or (C;B;D;E;F)>. The strongest defense is g.

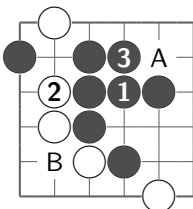
If Black plays 4-move A or B first, he cannot win.



[A07 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

- same wherever 2 ($\langle A \rightarrow 3 \rangle$ is also possible)

A/3 is met by White b.

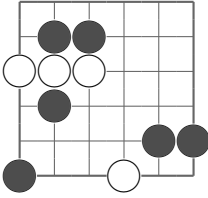


[A08 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

White 4-move against 3 is ineffective.

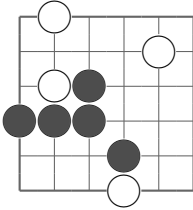
- if 2 elsewhere, Black wins by $\langle 3 \rightarrow A \rangle$
($\langle A \rightarrow (3 (;2)) \rangle$ is also possible)

A/3 is met by White B.



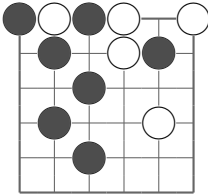
[A09_(c088)] Black to play and win.

Hint: Since Threat moves are limited, “Find VCT” is a helpful hint.



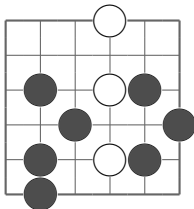
[A10_(c198)] Black to play and win.

Hint: It seems simple, but ... Try to find the solution without putting stones.



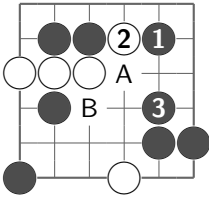
[A11_(c174)] Black to play and win.

Hint: A move sometimes has great power.



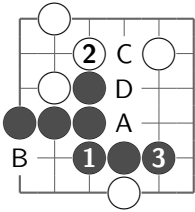
[A12_(c115)] Black to play and win.

Hint: One may feel difficult and easy at the same time when he plays the first move at correct spot,



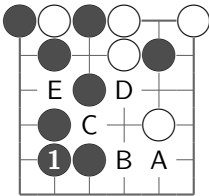
[A09 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.
 White 4-move is ineffective through the procedure.

- same wherever 2



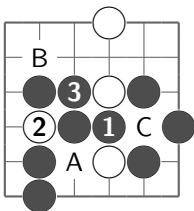
[A10 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C;A;D) \rangle$.

- if 2 elsewhere, Black wins by $\langle 3 \rightarrow A \rangle$



[A11 Ans] Black wins by $\langle 1 \rightarrow (A(;B)) \text{ or } (C;D;E) \rangle$.

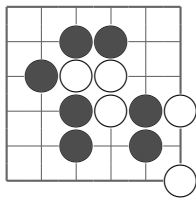
Both D/1 and E/1 are met by White 1. 'Any Black 4-move'/1 makes him lose winning.



[A12 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

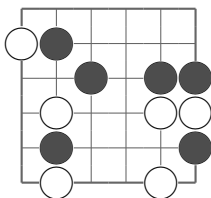
- if 2 elsewhere, Black wins at B or C

C/1 is met by White 4-move 1. 2 followed by C suffers Nori-move.



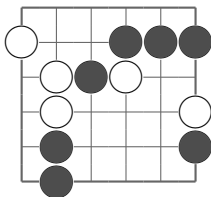
[A13_(c160)] Black to play and win.

Hint: There exist some hopeful sequences, but the solution is unique.



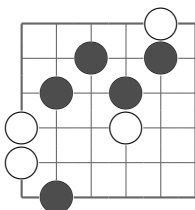
[A14_(c078)] Black to play and win.

Hint: Your opponent can play 4-move. Do you feel difficult to attack?



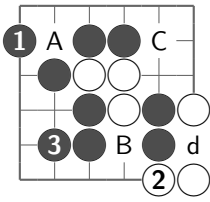
[A15_(c062)] Black to play and win.

Hint: Black wins by a good first move. Note that some incorrect moves also seem good.



[A16_(c146)] Black to play and win.

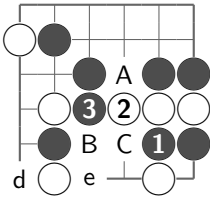
Hint: Don't be impatient to win.



[**A13 Ans**] Black wins by $\langle 3 \rightarrow A \rangle$.

- if 2 elsewhere, Black wins at B or C

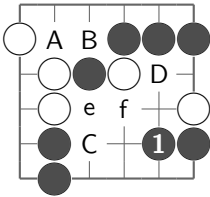
2/1 is met by White 1, and next 3 by White d. B/1 is met by White 3.



[**A14 Ans**] Black wins by $\langle 3 \rightarrow A \text{ or } B \rangle$.

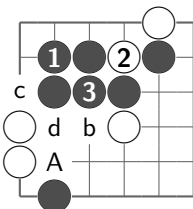
- if 2 elsewhere, Black wins by (2;A;C)

3/1 is met by White d, and next 1 and B by White 4-move e.



[**A15 Ans**] Black wins by $\langle 1 \rightarrow A \text{ or } (B;C) \text{ or } (C;D) \rangle$.

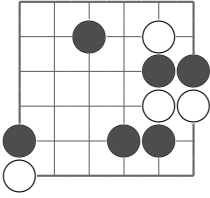
C/1 is met by White e, and next (A;f) does not make 4-3 because spot 1 is 4-4. D/1 is met by White f.



[**A16 Ans**] Black wins by $\langle 3 \rightarrow A \rangle$.

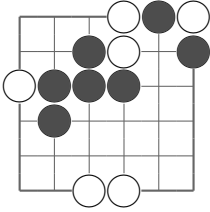
- if 2 elsewhere, Black wins at A

A/1 is met by White b, 3/1 by c and A/3 by (d;b).



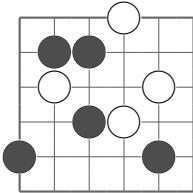
[A17_(c069)] Black to play and win.

Hint: Play a move which contains multiple aims.



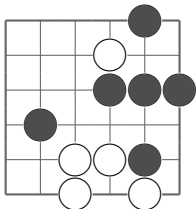
[A18_(c228)] Black to play and win.

Hint: It doesn't require very good moves. You must prepare VCF in advance for some variations.



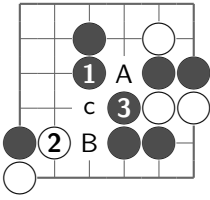
[A19_(c180)] Black to play and win.

Hint: White might counterattack, but you should not have a fear.



[A20_(c118)] Black to play and win.

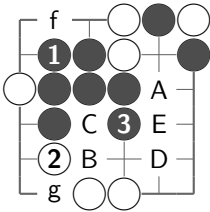
Hint: A move with many options is required.



[A17 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.
 White 4-move against 3 is ineffective.
 Black can win by 'c followed by 3'/3, but it needs one more Black move though the same winning pattern⁶.

- same wherever 2

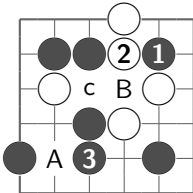
B followed by 1 is met by White 2 followed by c.



[A18 Ans] Black wins by $\langle 3 \rightarrow (A;B;C) \text{ or } (A;D;E) \rangle$.

- if f/2, Black wins by $\langle g;A;3 \rangle$.
- if g/2, Black wins by $\langle f;A;E;D \rangle$

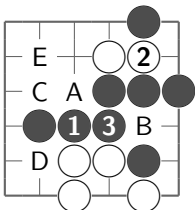
3/1 is met by White g, E/1 by 3-etc⁷ and f/1 by E-etc.



[A19 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.
 White 4-move against 3 is ineffective.

- if 2 elsewhere, Black wins by $\langle 3 \rightarrow A \rangle$

3/1 is met by White c and A/3 by B.



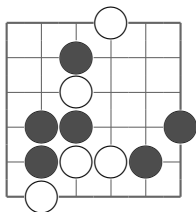
[A20 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

- if 2 elsewhere, Black wins at 2 or B, or wins by $\langle D \rightarrow C \rangle$

3/1 is met by White 1, D/1 by 1 and E/1 by A-etc.

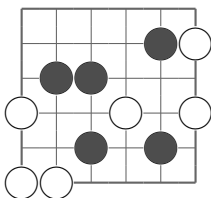
⁶ Difference between c for blocking White 4-move A after 3 and 'c followed by 3'/3 seems little. In the Renju Problems world, however, the length of VCT before last VCF is important. Since White 4-move A is considered as ineffective, it does not make VCT longer. On the other hand, the latter case makes VCT longer.

⁷ The suffix '-etc' is appended, if there exist other effective defense moves.



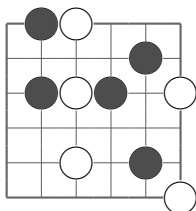
[A21_(c135)] Black to play and win.

Hint: Are you ready to overcome White Nori-move?



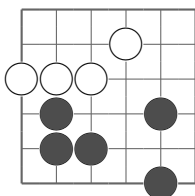
[A22_(c130)] Black to play and win.

Hint: Moderate attack is recommended, for avoiding troubles of White Three and Four.



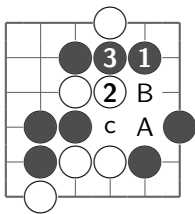
[A23_(c194)] Black to play and win.

Hint: Be careful about White Nori-move.



[A24_(c083)] Black to play and win.

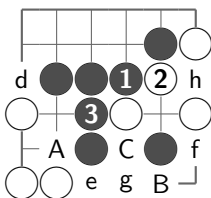
Hint: You should not fear White 4-move and Mise-move too much.



[**A21 Ans**] Black wins by $\langle 3 \rightarrow (A(;B)) \rangle$.

- if 2 elsewhere, Black wins at A

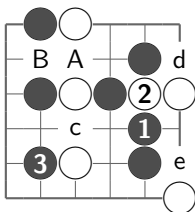
2/1 is met by White 1 and A/3 by (c;B).



[**A22 Ans**] Black wins by $\langle 3 \rightarrow A \rangle$.

- if 2 elsewhere, Black wins at 2

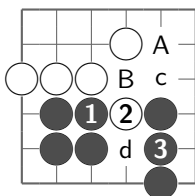
3/1 is met by White e, and next B and 1 are met by White d and 4-move g respectively. A/1 is met by White f, B/1 by h-etc, C/1 by f-etc and A/3 by f.



[**A23 Ans**] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

- same wherever 2

3/1 is met by White 4-move c followed by d. A/1 is met by White d-etc and B/3 by 4-move A. '4-move A followed by B'/3 is met by White e followed by 4-move d.

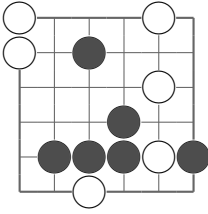


[**A24_(cos3) Ans**] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

White 4-move is ineffective through the procedure.

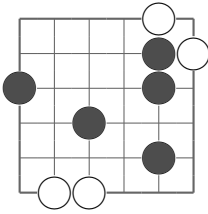
- same wherever 2

3/1 is met by White 4-move c followed by d.



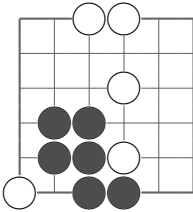
[A25_(c070)] Black to play and win.

Hint: How much do you pay attention about White 4-move?



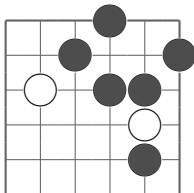
[A26_(c077)] Black to play and win.

Hint: Black's winning will be made clear by his second good move.



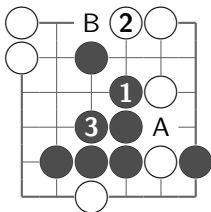
[A27_(c233)] Black to play and win.

Hint: You might fall into a trap if you think it too easy.



[A28_(c128)] Black to play and win.

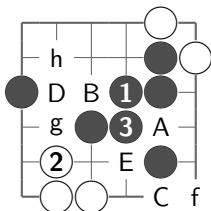
Hint: Successful if you play the first move at a key spot.



[A25 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.
 Every White 4-move is ineffective through the procedure.

- if 2 elsewhere, Black wins by $\langle 3 \rightarrow A \rangle$

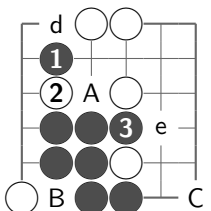
A/1 is met by White 1-etc.



[A26 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } B \text{ or } (C;D;E) \rangle$ ⁸.
 The strongest defense against 3 is f.

- if 2 elsewhere, Black wins by (2;C;D;E)

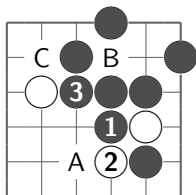
3/1 is met by White C and B/1 by 1.



[A27 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.
 White 4-move against 1 is ineffective.

- if 2 elsewhere, Black wins in the same way, or wins by (B;C;A;3)

3/1 is met by White e, and next 1 by White d.



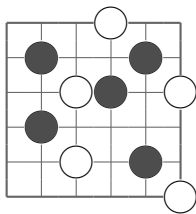
[A28 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

- if 2 elsewhere, Black wins in the same way, or wins by (2;A) or (B;C)

2/1 is met by White 1-etc and A/1 by 1.

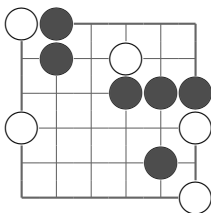
Although there are no spots of 3-move nor 4-move, a strong Fukumi-move brings winning to Black.

⁸ Another VCF (B;h) also exists when White plays 4 at g.



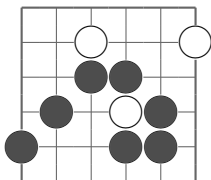
[A29_(c108)] Black to play and win.

Hint: It is not so easy to decide the first move. The winning move is double-Mise-move.



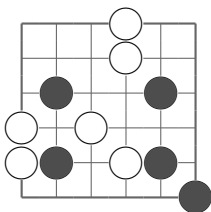
[A30_(c094)] Black to play and win.

Hint: Black knows that White will play Nori-move against some kind of attack.



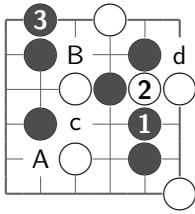
[A31_(c066)] Black to play and win.

Hint: The forbidden 3-3 spot can become useful.



[A32_(c121)] Black to play and win.

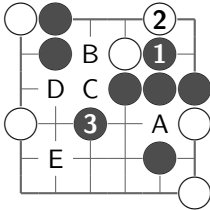
Hint: There seems to be a winning sequence ‘Three followed by 4-3’, but this is not correct due to White 4-move.



[**A29 Ans**] Black wins by $\langle 3 \rightarrow A \text{ or } B \rangle$.

- same wherever 2

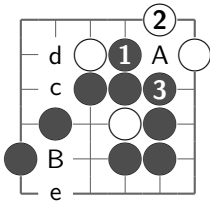
3/1 is met by White c, B/1 by d and B/3 by d.



[**A30 Ans**] Black wins by $\langle 3 \rightarrow (A;B;C) \rangle$.

- if 2 elsewhere, Black wins by (D;E)

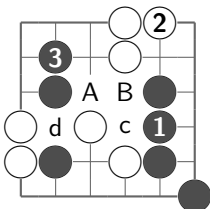
A/1 is met by White 1. (D;E) after 2 suffers Nori-move.



[**A31 Ans**] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

c/1 is met by White 3, A/1 by 3, d/1 by c and e/1 by B-etc. Both (2;3) and (2;A;B) are met by White Nori-move.

By forcing White to play at 2, the 3-3 spot changes to a single Three.

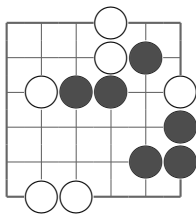


[**A32 Ans**] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

Every White 4-move is ineffective through the procedure.

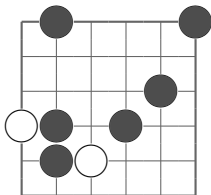
- same wherever 2

3/1 is met by White (c;d;A).



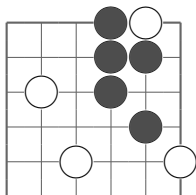
[A33_(c150)] Black to play and win.

Hint: Several candidates of Three exist. Consider the correct order of 3-moves.



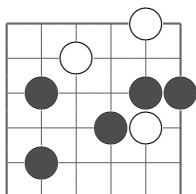
[A34_(c193)] Black to play and win.

Hint: There are some candidates for the first move, and strong defenses for those except one.



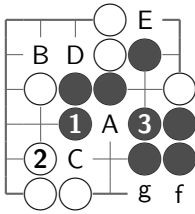
[A35_(c209)] Black to play and win.

Hint: Prepare some kind of trick in advance.



[A36_(c238)] Black to play and win.

Hint: 'Three followed by 4-3' suffers Nori-move, but ...

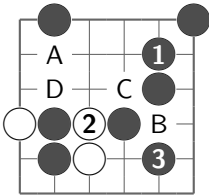


[A33 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

White 4-move against 3 is ineffective.

- if 2 elsewhere, Black wins by $(2;C;D;3;E;A)$

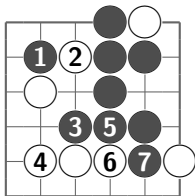
A/1 is met by White f, 3/1 by g and A/3 by B.



[A34 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

- if 2 elsewhere, Black wins in the same way, or wins by $(2;B)$ or $(C;D)$

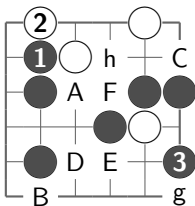
2/1 is met by White 1, B/1 by 1 and C/1 by A-etc.



[A35 Ans] After 7 played, Black has two Threes and wins.

- if 4 elsewhere, Black wins at 5
- same wherever 2

3/1 is met by White 4, and next 1 by White 4-move 6.



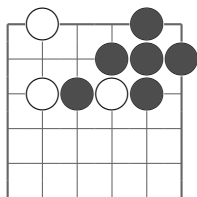
[A36 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C) \text{ or } (B;D;E;F) \rangle$.

The strongest defense against 3 is g.

- if 2 elsewhere, Black wins at A

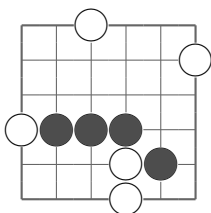
E/3 is met by White 4-move F followed by D. 'F followed by E'/3 is met by White A followed by h. 'A followed by 3'/3 is met by White F followed by g.

3 Middle Level VCT Problems



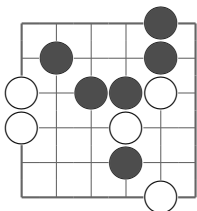
[B01_(c248)] Black to play and win.

Hint: You might think this problem is elementary level after you solved. There are some moves that look good, but they are traps using fake Three.



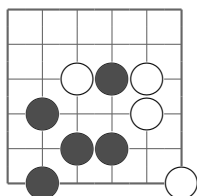
[B02_(c139)] Black to play and win.

Hint: Your intuition is maybe correct, but you must consider White defenses.



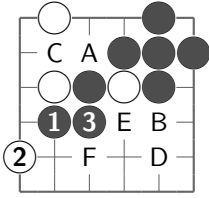
[B03_(c195)] Black to play and win.

Hint: There are always three spots to block Three.

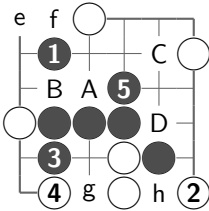


[B04_(c187)] Black to play and win.

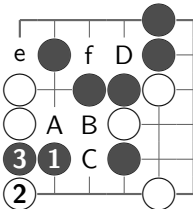
Hint: Every hopeful Black Threat seems risky, since White will get chances to make Three or Four. Don't feel afraid.



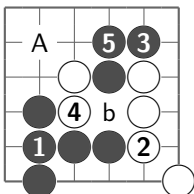
[B01 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } B \rangle$.
 4-move A and B instead of 1 or 3 also yield Black win, but each of them needs more moves though the same winning pattern.
 # (C;D) is not correct due to Nori-move. 3/1 is met by White 1, E/1 by 3 (neither C nor D is 4-3) and F/1 by 3.



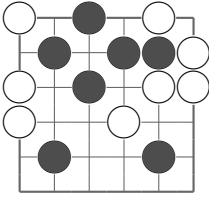
[B02 Ans] Black wins by $\langle 5 \rightarrow (A;B) \rangle$.
 • if 2 and 4 against 1 and 3 are e and f respectively, Black wins in the same way.
 if 2 and 4 elsewhere, Black wins by $\langle C \rightarrow D \rangle$
 # C/5 is met by White 4-move g or h followed by 5.



[B03 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C) \rangle$.
 • if 2 elsewhere, Black wins by $\langle A \rightarrow D \rangle$
 (# $\langle D \rightarrow A \rangle$ is not correct)
 # D/1 is met by White f, D/3 by f-etc and e/3 by f. f/3 is met by White 4-move e followed by A-etc (neither B nor C is 4-3).

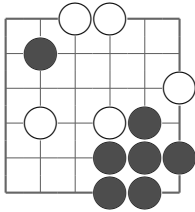


[B04 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.
 White 4-move against 3 is ineffective.
 • same wherever 4
 • same wherever 2
 # 5/1 is met by White b.



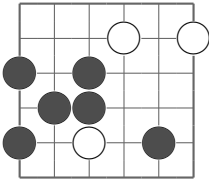
[B05_(c222)] Black to play and win.

Hint: Be careful about White 4-move. The winning sequence has few variations.



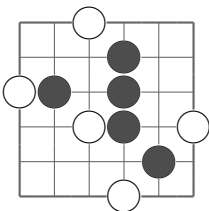
[B06_(c211)] Black to play and win.

Hint: Play after you have calculated VCF of length 5.



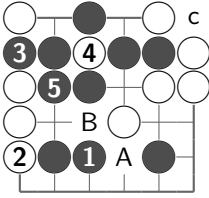
[B07_(c149)] Black to play and win.

Hint: Black finally wins after a strong Fukumi-move.



[B08_(c183)] Black to play and win.

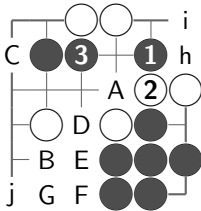
Hint: Analyse not only the main line but also variations.



[B05 Ans] Black wins by $\langle 5 \rightarrow (A;B) \rangle$.

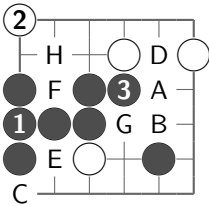
- if 2 elsewhere, Black wins at B

B/1 is met by White 4-move 3 and B/5 by c.



[B06 Ans] Black wins by $\langle 3 \rightarrow (A;B) \text{ or } (C;D;E;F;A) \rangle$.
The strongest defense against 3 is h.

3/1 is met by White 1, G/1 by j, G/3 by j and A/3 by i. (C;D;A) is not correct, when White plays 4 at h.

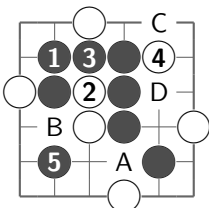


[B07 Ans] Black wins by $\langle 3 \rightarrow (A;B) \text{ or } (C;D;A) \text{ or } (C;D;B) \text{ or } (C;E;F) \text{ or } (G;H;F) \text{ or } (C;E;G;H) \rangle$.

Six kinds of VCF are necessary.

- if 2 elsewhere, Black wins at G

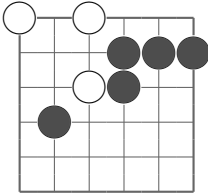
A/3 is met by White B, D/3 by B, E/3 by G and F/3 by G.



[B08 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

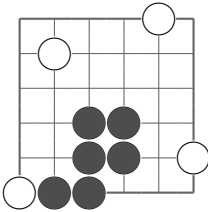
- same wherever 4
- if 2 elsewhere, Black wins by $\langle 5 \rightarrow A \text{ or } (B;2;C;D;4) \rangle$

2/1 is met by White 1 and 5/3 by 4-move 3.



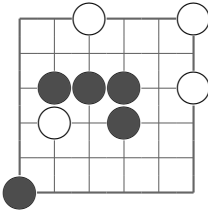
[B09_(c182)] Black to play and win.

Hint: It is clear that ‘Three followed by 4-3’ suffers Nori-move. It might be too early to give up this line.



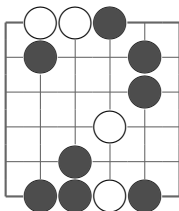
[B10_(c226)] Black to play and win.

Hint: Some kinds of VCF are prepared toward the finish.



[B11_(c225)] Black to play and win.

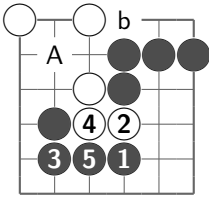
Hint: Confirm VCF against the defense which seems strong.



[B12_(m2a)] Black to play and win.

Note that stones form the shape of ‘2’.

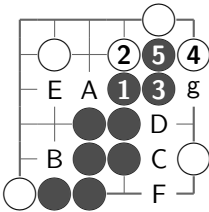
Hint: Black starts by Mise-move. Which Mise-move is it?



[B09 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.
 White 4-move is ineffective.
 A/5 also yields Black win, but it needs one more Black move though the same winning pattern.

- if 4 elsewhere, Black wins at A
- if 2 elsewhere, Black wins by $\langle 4 \rightarrow 2 \rangle$

3/1 is met by White 4, and next 1 by White b.

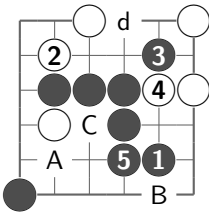


[B10 Ans] Black wins by $\langle 5 \rightarrow A \text{ or } (B;C;D) \text{ or } (A;E;F;D) \rangle$.

The strongest defense against 5 is g.

- if 2 elsewhere, Black wins by (3;A)

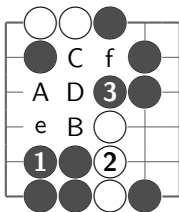
5/3 is met by White 3.



[B11 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

- if 4 elsewhere, Black wins in the same way, or wins by (4;B;C;5)
- same wherever 2

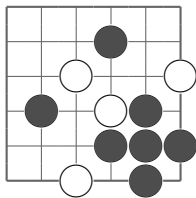
Both 5/1 and 5/3 are met by White d.



[B12 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

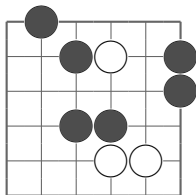
- if 2 elsewhere, Black wins in the same way, or wins by $\langle B \rightarrow C \rangle$ ($\langle C \rightarrow B \rangle$ is also possible)

B/1 is met by White C, and next 1 by White 3. D/1 is met by White B, and next 1 by White e. C/1 is met by White f, and next 3 and 1 are met by White B and 3-etc respectively. 2/1 is met by White 1.



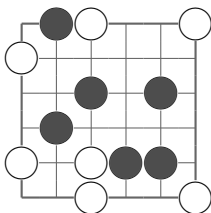
[B13_(c163)] Black to play and win.

Hint: Is it true that “A good move is in the middle if symmetric”?



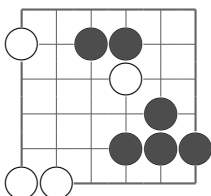
[B14_(c111)] Black to play and win.

Hint: By forcing White at one side, Black increases his potential power.



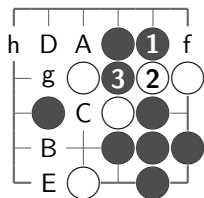
[B15_(c122)] Black to play and win.

Hint: The first move is 3-move or Mise-move. Which is correct?



[B16_(c105)] Black to play and win.

Hint: Strong White defense will be at the bottom. Black attacks so that the effect of White 4-move is nullified.

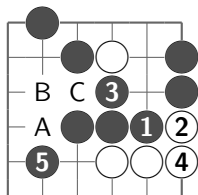


[B13 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B(;)C) \rangle$ or $\langle A;D;B;E \rangle$.

The strongest defense against 3 is f.

The first move can be B because of symmetric form.

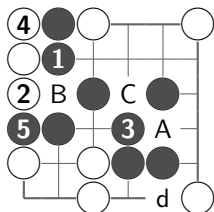
D/1 is met by White A-etc, 3/1 by 1 and A/1 by 1-etc. A/3 is met by White 4-move 3 followed by White D. (A;h;C) is not correct, when White 4 is f.



[B14 Ans] Black wins by $\langle 5 \rightarrow (A;B;C) \rangle$.

- if 2 elsewhere, Black wins in the same way, or wins at 4

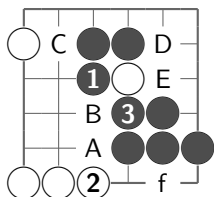
2/1 is met by White 4-etc and 4/1 by 2.



[B15 Ans] Black wins by $\langle 5 \rightarrow A \text{ or } (B;C) \rangle$.

- if 2 elsewhere, Black wins by $\langle A \rightarrow 3 \rangle$

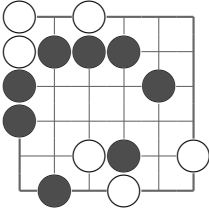
B/1 is met by White C and A/1 by d.



[B16 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

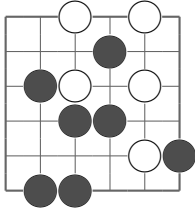
- if 2 elsewhere, Black wins by $\langle C \rightarrow (D(;)E) \rangle$
 $\langle D \rightarrow (C(;)3) \rangle$ is also possible

Both C/1 and D/1 are met by White f. '4-move A followed by 1'/1 is met by White 2, which gives chances of 4-move B and f to White. Both C/3 and D/3 are met by White 4-move f.



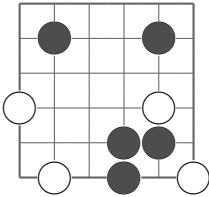
[B17_(c164)] Black to play and win.

Hint: Fukumi-move can be a decisive move.



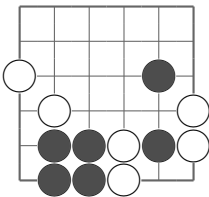
[B18_(c166)] Black to play and win.

Hint: The first move removes the chance of White 4-move



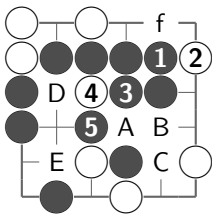
[B19_(c205)] Black to play and win.

Hint: Make a basic plan first, and consider White defenses and the order of moves carefully.



[B20_(c129)] Black to play and win.

Hint: Black attacks so that the effect of White 4-move is nullified.

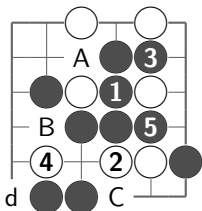


[B17 Ans] Black wins by $\langle 5 \rightarrow (A;B) \rangle$.

- if 4 elsewhere, Black wins in the same way, or wins by $\langle 4;A;C \rangle$ or $\langle D;E \rangle$

3/1 is met by White 1 and B/5 by f.

In the problem figure, there are only two lines for Three. If White plays at the intersection of those lines (1 in the solution figure), Black cannot make 4-3.

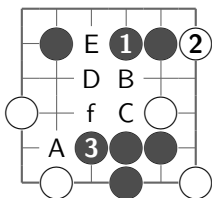


[B18 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

$\langle A \rightarrow 5 \rangle$ after 4 is also possible.

- if 4 elsewhere, Black wins by $\langle 4;B \rangle$
- if 2 elsewhere, Black wins in the same way, or wins at C

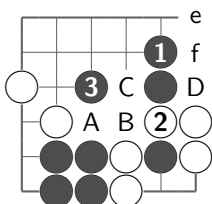
2/1 is met by White C-etc, 5/1 by B, C/1 by d and 5/3 by B. B/3 is met by White 4-move 5 followed by White 4-etc. 4/3 is met by White 4-move 3 followed by White B-etc.



[B19 Ans] Black wins by $\langle 3 \rightarrow (A;B) \text{ or } (C;D;E) \rangle$.

- if 2 elsewhere, Black wins by $\langle A \rightarrow B \rangle$

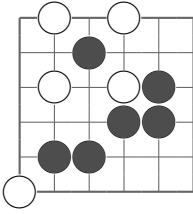
A/1 is met by White 3, and next 1 and B are met by White 2 and f respectively. 3/1 is met by White A and A/3 by 3.



[B20 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } B \text{ or } (A;C;B;D) \rangle$. The strongest defense against 3 is e.

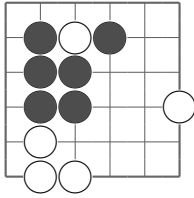
- same wherever 2

3/1 is met by White f-etc and A/3 by C.



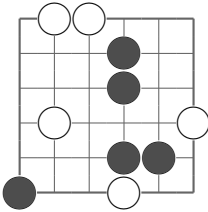
[B21_(c017)] Black to play and win.

Hint: It is said that “3-3 is an egg of 4-3”.



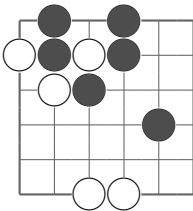
[B22_(c220)] Black to play and win.

Hint: Fake Threes which are open at both ends will take active roles.



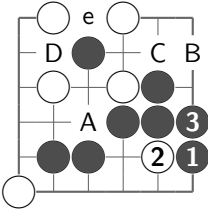
[B23_(c090)] Black to play and win.

Hint: Select one by looking-ahead from the candidates of first moves.



[B24_(c219)] Black to play and win.

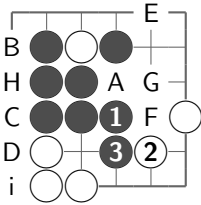
Hint: The winning move is double-Mise-move.



[B21 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } B \rangle$.

- if 2 elsewhere, Black wins in the same way, or wins by (2;B;C;D)

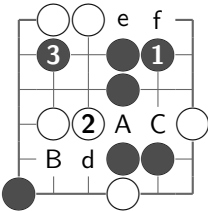
3/1 is met by White e.



[B22 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C;D) \rangle$.

- if 2 elsewhere, Black wins by (2;E;F;G)

H/3 is met by White G and B/3 by i.

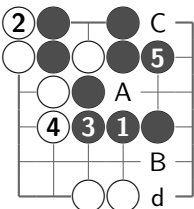


[B23 Ans] Black wins by $\langle 3 \rightarrow A \rangle$

White 4-move against 3 is ineffective.

- if 2 elsewhere, Black wins in the same way, or wins by (B(;A)) or $\langle C \rightarrow B \rangle$

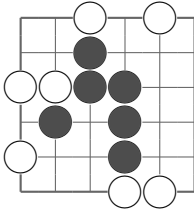
B/1 is met by White d, and next 3 by White A. 3/1 is met by White e and C/3 by f.



[B24 Ans] Black wins by $\langle 5 \rightarrow A \text{ or } B \rangle$.

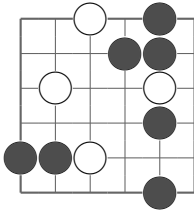
- same wherever 4
- if 2 elsewhere, Black wins by (2;C;4) or $\langle C \rightarrow 4 \rangle$

C/1 is met by White 2 and 5/3 by d.



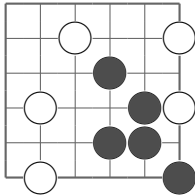
[B25_(c097)] Black to play and win.

Hint: Prepare a trick to prevent Nori-move.



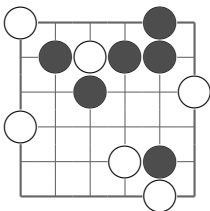
[B26_(c216)] Black to play and win.

Hint: 'Three followed by 4-3' seems impossible. Find another possibility.



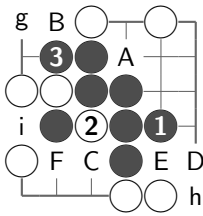
[B27_(c251)] Black to play and win.

Hint: You need not fear White 4-move if you keep correct order of moves.



[B28_(c218)] Black to play and win.

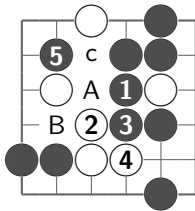
Hint: Possible spots of winning 4-3 are already limited. Play after you decide whether 4-move should be done or not.



[B25 Ans] Black wins by $\langle 3 \rightarrow (A (; B)) \rangle$.

- if 2 elsewhere, Black wins by $\langle 2; C; D; E \rangle$
 ((2; C; D; F) is also possible)

3/1 is met by White g, 2/1 by 1, E/1 by h-etc and B/1 by i.

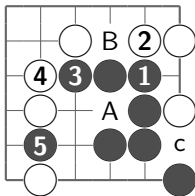


[B26 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

White 4-move against 3 is ineffective.

- same wherever 4
- if 2 elsewhere, Black wins by $\langle 2; B \rangle$

2/1 is met by White 1, 5/1 by c and 5/3 by c.

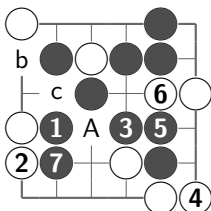


[B27 Ans] Black wins by $\langle 5 \rightarrow (A; B) \rangle$.

White 4-move against 3 or 5 is ineffective.

- if 4 elsewhere, Black wins by $\langle A; B \rangle$
- if 2 elsewhere, Black wins by $\langle 3 \rightarrow A \rangle$, or 3 followed by $\langle 5 \rightarrow A \rangle$

Both 5/1 and 5/3 are met by White c.

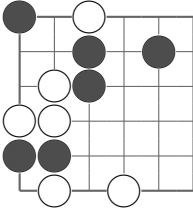


[B28 Ans] Black wins by $\langle 7 \rightarrow A \rangle$.

Any order of 1, 3 and 5 is possible.

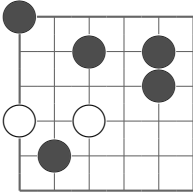
White 4-move against 7 is ineffective.

If Black does not play 4-move 1, White plays at 1. If Black does not play 4-move 3 and 5, White plays 4-move b followed by c.



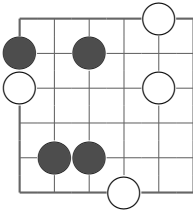
[B29_(c060)] Black to play and win.

Hint: We see some hopeful moves, but they suffer Nori-move. One of them can overcome Nori-move.



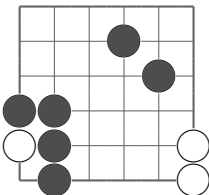
[B30_(c239)] Black to play and win.

Hint: Where is the final 4-3 spot? You found it? Wonderful!



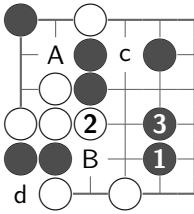
[B31_(c210)] Black to play and win.

Hint: White will have a chance to play 4-move, but you should not make White 4-move effective.



[B32_(c133)] Black to play and win.

Hint: Pay attention to White defense by 4-move or the possibility.

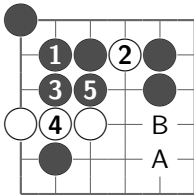


[B29 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.

A/3 also yields Black win, but it needs one more Black move though the same winning pattern.

- if 2 elsewhere, Black wins by (B;2)

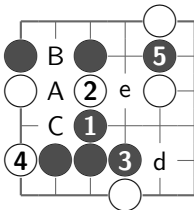
A/1 is met by White c, B/1 by 2 and 2/1 by d.



[B30 Ans] Black wins by $\langle 5 \rightarrow (A;B) \rangle$.

- if 4 elsewhere, Black wins by $\langle 5 \rightarrow A \rangle$
- same wherever 2

All of A/1, A/3 and A/5 are met by White B.

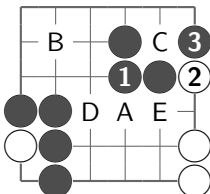


[B31 Ans] Black wins by $\langle 5 \rightarrow (A;B;C) \rangle$.

Each White 4-move against 3 and 5 is ineffective.

- if 4 elsewhere, Black wins by $\langle 5 \rightarrow (A;B) \rangle$
- same wherever 2

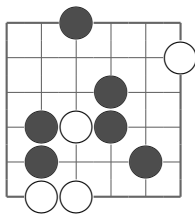
3/1 is met by White d, and next 1 by White 4-move 5. 5/3 is met by White 4-move e followed by 3. A/3 is met by White 3.



[B32 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C) \rangle$.

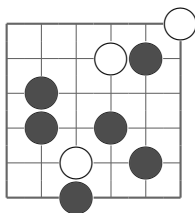
- if 2 elsewhere, Black wins by $\langle D \rightarrow A \rangle$
($\langle A \rightarrow D \rangle$ is also possible)

3/1 is met by White A, A/1 by 3, C/1 by 3 and E/1 by 3-etc. All of A/3, C/3 and D/3 are met by White 4-move 3.



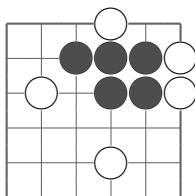
[B33_(c206)] Black to play and win.

Hint: Find victory in upper side by using potential power in lower side.



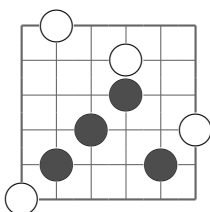
[B34_(c056)] Black to play and win.

Hint: Depending on White defense, final winning pattern will change.



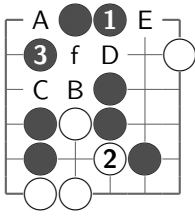
[B35_(c221)] Black to play and win.

Hint: Consider White defenses, and find correct sequence for each variation.



[B36_(c204)] Black to play and win.

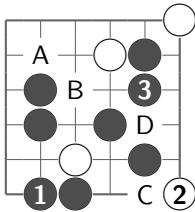
Hint: A little long sequence of Threes. White defends as hard as possible.



[B33 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C) \rangle$.

- if 2 elsewhere, Black wins in the same way, or wins by $\langle B \rightarrow (D;E) \text{ or } (3;C) \rangle$

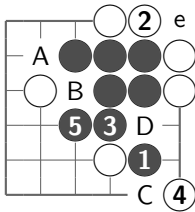
3/1 is met by White B, and next 1 by White 4-move f-etc. A/1 is met by White B-etc.



[B34 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

- if 2 elsewhere, Black wins by $\langle C \rightarrow D \rangle$

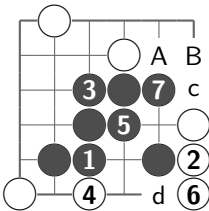
'C followed by 1'/1 is met by White D followed by 2.



[B35 Ans] Black wins by $\langle 5 \rightarrow (A;B) \rangle$.

- Black wins by (A;C) if 5/4, $\langle 5 \rightarrow A \rangle$ if C/4 or $\langle 5 \rightarrow D \rangle$ if 4 elsewhere
- if 2 elsewhere, Black plays Three 5 and wins by $\langle B \rightarrow A \rangle$

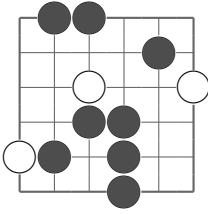
Both 5/1 and 5/3 are met by White e.



[B36 Ans] Black wins by $\langle 7 \rightarrow ((B;A)) \rangle$.

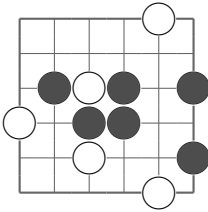
- same wherever 6
- if 4 elsewhere, Black plays Three 7 (White defends it at c) and wins by $\langle B \rightarrow A \text{ or } 5 \rangle$
- if 2 elsewhere, Black plays Three 3 and wins by $\langle 7 \rightarrow A \rangle$

7/5 is met by White c, and next B by White d.



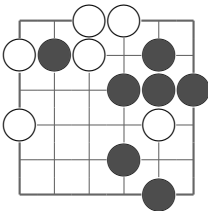
[B37_(c137)] Black to play and win.

Hint: The first move is clear, if you are a senior player.



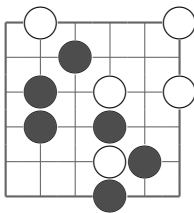
[B38_(c107)] Black to play and win.

Hint: White seems to have strong defenses for each Black Threat. Select the move which increases Black's potential power.



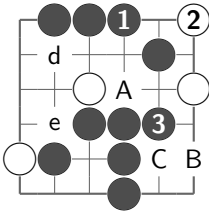
[B39_(c185)] Black to play and win.

Hint: The correct sequence has few variations.



[B40_(c126)] Black to play and win.

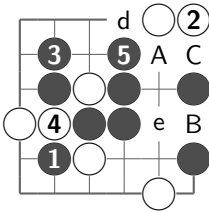
Hint: Find out a sequence that promotes 'hopeful' to 'winning'.



[B37 Ans] Black wins by $\langle 3 \rightarrow (A; B; C) \rangle$.

- if 2 elsewhere, Black wins by open Four A

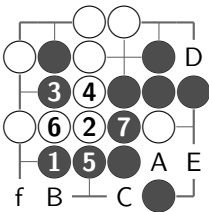
d/1 is met by White A, 3/1 by e and e/1 by 3.



[B38 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

- if 4 elsewhere, Black wins by $(4; B; C; A; 5)$
- if 2 elsewhere, Black wins by $(2; B; 4)$ or $\langle B \rightarrow 4 \rangle$
 ($\langle 4 \rightarrow B \rangle$ is also possible)

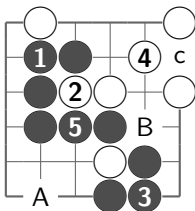
B/1 is met by White 2, e/1 by 4-etc, 5/1 by d and 5/3 by d.



[B39 Ans] Black wins by $\langle 7 \rightarrow A \text{ or } (B; C) \text{ or } (D; E) \rangle$, where A is open Four.

- 6 is necessary for blocking two Threes
- if 2 elsewhere, Black wins at 3

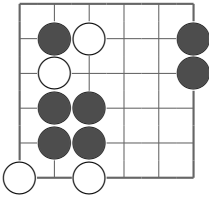
7/1 is met by White 4-etc, and next 1 and B are met by White f. 7/3 is met by White A and 5/3 by 4-move 7.



[B40 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

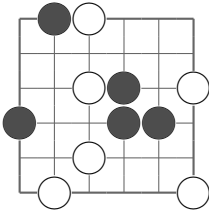
- if 4 elsewhere, Black wins by $\langle 4 \rightarrow A \rangle$ or $\langle 4 \rightarrow B \rangle$
- if 2 elsewhere, Black wins by $\langle 5 \rightarrow 2 \rangle$

4/3 is met by White c.



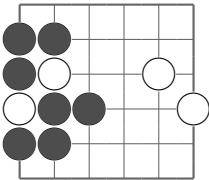
[B41_(c119)] Black to play and win.

Hint: Black starts with a broken Three. Which broken Three is it?



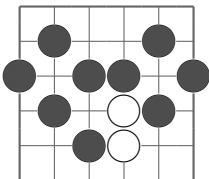
[B42_(c082)] Black to play and win.

Hint: Black uses the fact that White cannot play 4-move currently. White resists as hard as possible.



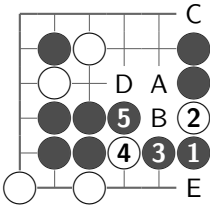
[B43_(c085)] Black to play and win.

Hint: The first move is not Three.



[B44_(c100)] Black to play and win.

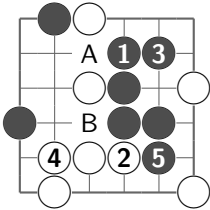
Hint: There are some forbidden spots of 3-3. Black turns the rule of Overline to his own advantage.



[B41 Ans] Black wins by $\langle 5 \rightarrow (A;B) \rangle$.

- if E/2, Black wins by $\langle 5 \rightarrow (C;D;4) \text{ or } (A;B;3) \rangle$.
if C/2, Black wins by $\langle E;3;5;A;B \rangle$

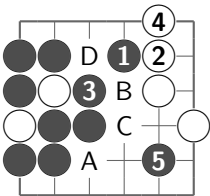
2/1 is met by White 1-etc, 3/1 by 1, 4/1 by 3, 5/1 by 2, B/1 by 5 and 5/3 by 3.



[B42 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

- if 2 elsewhere, Black wins by $\langle 3 \rightarrow A \text{ or } B \rangle$

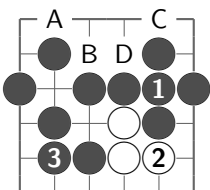
3/1 is met by White B. Black cannot win if he plays 4-move before making 4-3.



[B43 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

- if D/2, Black plays B and wins by $\langle C \rightarrow 3 \rangle$.
if 2 elsewhere, Black wins by $\langle D;3 \rangle$

3/1 is met by White D, 2/1 by B and D/1 by 2-etc.

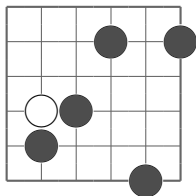


[B44 Ans] Black wins by $\langle 3 \rightarrow (A;B) \rangle$.

Black 3 makes a single Three on a diagonal line.

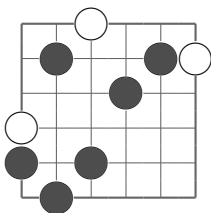
- if 2 elsewhere, Black wins in the same way, or wins by $\langle C;D \rangle$

A/1 is met by White 3 (spot B is 4-3-3) and C/1 by B-etc. .



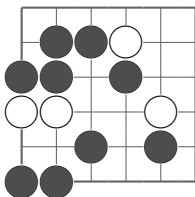
[B45_(c124)] Black to play and win.

Hint: Where is the final 4-3 spot? Although the sequence is rather long, it is not so difficult.



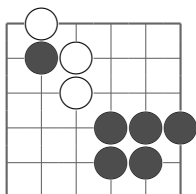
[B46_(c039)] Black to play and win.

Hint: Black uses *Mise-move* very well.



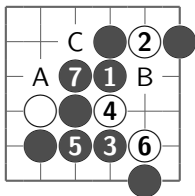
[B47_(c075)] Black to play and win.

Hint: There is a 4-3-3 spot. Black tries to win by playing his move at that spot.



[B48_(c095)] Black to play and win.

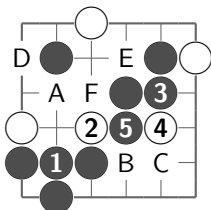
Hint: White seems to have *Nori-move* wherever Black plays. Decide the first move by considering the moves after *Nori-move*.



[B45 Ans] Black wins by $\langle 7 \rightarrow A \rangle$.

- same wherever 6
- if 4 elsewhere, Black wins by $\langle 5 \rightarrow (4; B; A) \rangle$
- if 2 elsewhere, Black plays 3 and wins by $\langle 5 \rightarrow (2; C) \rangle$

2/1 is met by White 1 and C/1 by 2-etc.

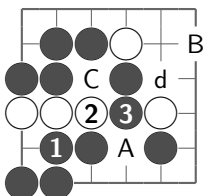


[B46 Ans] Black wins by $\langle 5 \rightarrow A \text{ or } B \rangle$.

Both 'A followed by 5'/5 and 'B followed by 5'/5 also yield Black win, but they need one more Black move though the same winning pattern.

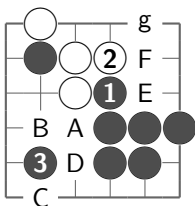
- if 4 elsewhere, Black wins at A or C
- if 2 elsewhere, Black wins by (B;2;A;D;E)

A/1 is met by White 1, F/3 by 5 and 5/3 by C. 'A followed by 3'/3 is met by White 4-move 5.



[B47 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } B \rangle$, where A is open Four and Four B makes Three at C by forcing White to play at d.

- if White does not play 4-move 2, Black wins by 4-3 at C (C is not 4-3-3 because spot 2 is 4-4)

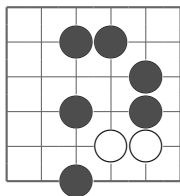


[B48 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B; C; D; E) \rangle$.

- if 2 elsewhere, Black wins by $\langle 3 \rightarrow A \rangle$
($\langle F \rightarrow A \rangle$ is also possible)

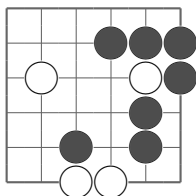
3/1 is met by White D, F/1 by g and F/3 by g.

4 Advanced Level VCT Problems



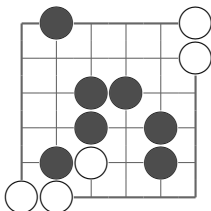
[C01_(c102)] Black to play and win.

Hint: Two White stones will make Nori-move, but you must not be afraid.



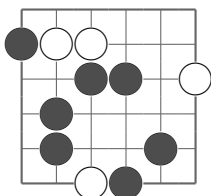
[C02_(c022)] Black to play and win.

Hint: Horizontal half-open Three will be utilized to the utmost.



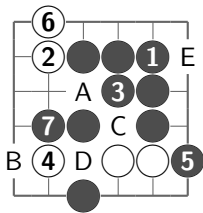
[C03_(c057)] Black to play and win.

Hint: White watches two 3-3 spots and prepares 4-move. Can Black escape this situation?



[C04_(c256)] Black to play and win.

Hint: Finally Black wins by VCF of length 5.



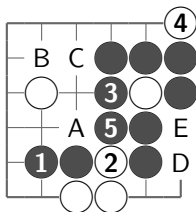
[C01 Ans] Black wins by $\langle 7 \rightarrow (A;B) \rangle$.

White 4-move against 7 is ineffective.

A/7 also yields Black win, but it needs one more Black move though the same winning pattern.

- if 4 elsewhere, Black wins at A
- if 2 elsewhere, Black wins by $\langle (D;E;C) \rangle$ or Three 4 followed by $\langle 7 \rightarrow 2 \rangle$

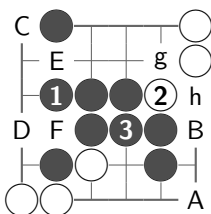
3/1 is met by White A, C/1 by 7 and 7/1 by C.



[C02 Ans] Black wins by $\langle 5 \rightarrow A \text{ or } B \rangle$.

- if 4 elsewhere, Black wins by $\langle (C;D) \rangle$
- if 2 elsewhere, Black wins at D, or wins by $\langle 3 \rightarrow (2;5;B) \rangle$

D/1 is met by White 4 and E/3 by 4-etc.

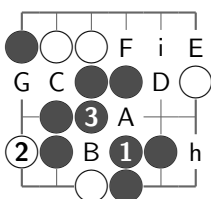


[C03 Ans] Black plays 1 followed by 3. At this time there are two fake Threes. Black can revive one of them by 4-move A or B or C or D.

Note that 3 is not even a single Three, but Fukumi-move.

- if 2 elsewhere, Black wins at 2
(Both E and F are also possible)

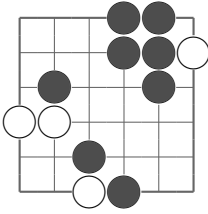
Both E/1 and F/1 are met by White 3 (Black 2 is not 3-3) followed by g. Both g/1 and h/1 are met by White 2, which forces Black 3, forbidden 3-3. Both 2/1 and 3/1 are forbidden 3-3.



[C04 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C;D;A;E) \rangle$.

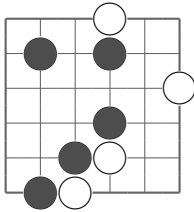
- if B/2, Black wins by $\langle 3 \rightarrow A \text{ or } (F;2;C;G) \rangle$.
- if h/2, Black wins by $\langle 3 \rightarrow A \text{ or } (2;C;G) \rangle$
(In each case Black can start with C as well)

3/1 is met by White i and C/3 by 3.



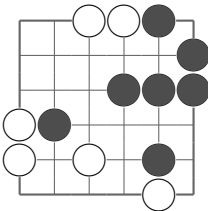
[C05_(c252)] Black to play and win.

Hint: The correct sequence is rather short. There are some hopeful candidates by which Black cannot win to his regret.



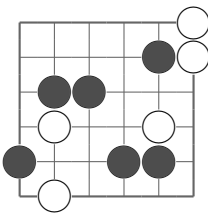
[C06_(c240)] Black to play and win.

Hint: After increasing power, Black plays a good move.



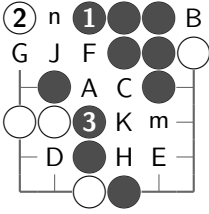
[C07_(c117)] Black to play and win.

Hint: Black makes use of the possibility of 4-move effectively,



[C08_(c214)] Black to play and win.

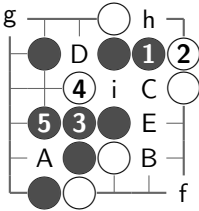
Hint: Making an 'egg of 4-3' with no plan will result in a failure.



[C05 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C) \text{ or } (B;D;E) \text{ or } (F;G;H;E) \rangle$.

- if 2 elsewhere, Black wins by $\langle A \rightarrow (F;J;E;K) \rangle$

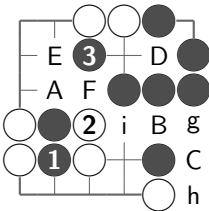
A/1 is met by White C, and next 1, F (White m) followed by K, and J are met by White 2, 2, and 2-etc respectively. When n/2, Black 3 is met by White F.



[C06 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

- if f/4, Black wins by $\langle 5 \rightarrow A \text{ or } (D;4;B;E) \rangle$
 $\langle E \rightarrow (5;A) \text{ or } (D;4;B) \rangle$ is also possible).
- if 4 elsewhere, Black wins by $\langle (D;4) \text{ or } \langle 5 \rightarrow A \rangle \rangle$
 $\langle A \rightarrow 5 \rangle$ is also possible)
- if 2 elsewhere, Black wins by $\langle B \rightarrow C \rangle$

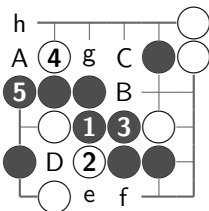
4/3 is met by White g, and next E by White h. A/5 is met by White i.



[C07 Ans] Black wins by $\langle 3 \rightarrow A \text{ or } (B;C) \text{ or } (D;E;F) \rangle$.

- if 2 elsewhere, Black wins at A or D

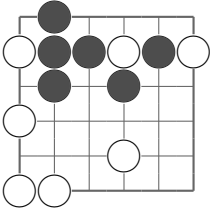
g/1 is met by White h, 2/1 by D, E/1 by A-etc and i/1 by F-etc. 'F followed by i'/1 is met by White A followed by h.



[C08 Ans] Black wins by $\langle 5 \rightarrow A \text{ or } B \rangle$.

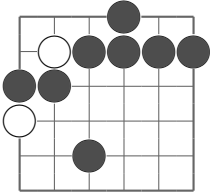
- if 4 elsewhere, Black wins by $\langle (4;A;C) \rangle$
- if D/2, Black wins by $\langle g \rightarrow (A;4) \rangle$.
- if 2 elsewhere, Black wins by $\langle (D;B) \rangle$

3/1 is met by White 4, and next 1 and 5 are met by White e and f respectively. '2 followed by 1'/1 is met by White D followed by g, and next 3 and 5 are met by White h. 5/3 is met by White h.



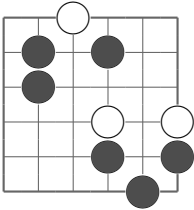
[C09_(c223)] Black to play and win.

Hint: White defends as hard as he can.



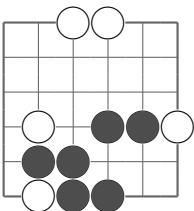
[C10_(c202)] Black to play and win.

Hint: Select a first move from many candidates. If you try to win very smartly, you may fail.



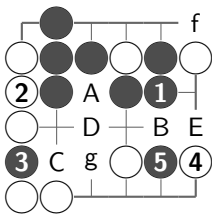
[C11_(c208)] Black to play and win.

Hint: Let broken Three play an important role.



[C12_(c145)] Black to play and win.

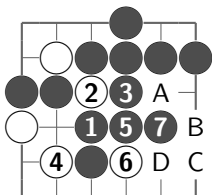
Hint: You must cope with every kind of defense.



[C09 Ans] Black wins by $\langle 5 \rightarrow A \rangle$.

- if 4 elsewhere, Black wins at B, or wins by $\langle C; D; A \rangle$
- if 2 elsewhere, Black wins at B

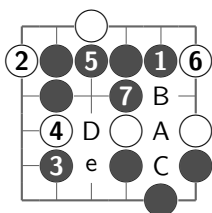
A/1 is met by White 2 followed by f, and next D and 'B followed by E' are met by White g and '4 followed by 5' respectively.



[C10 Ans] Black wins by $\langle 7 \rightarrow A \text{ or } (B; C) \rangle$.

- if 4 elsewhere, Black wins by $\langle 4; 6 \rangle$
- if 2 elsewhere, Black wins by $\langle 2; 3 \rangle$

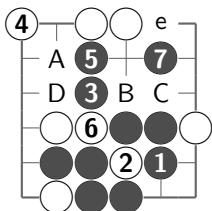
3/1 is met by White 1, and next D by White 7. All of A/1, 5/1 and 6/1 are met by White 3.



[C11 Ans] Black wins by $\langle 7 \rightarrow (A; B) \rangle$.

- if 4 elsewhere, Black wins by $\langle 7 \rightarrow (C; B; (4)) \rangle$
- if 2 elsewhere, Black wins by $\langle 3 \rightarrow D \rangle$

3/1 is met by White 4, and next 1 and '4-move C followed by 1' are met by White '4-move D followed by 5' and 'e followed by 2' respectively.

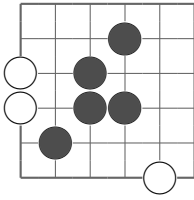


[C12 Ans] Black wins by $\langle 7 \rightarrow A \rangle$.

4-move e is ineffective, since $(B; C; (D))$ is newly born. 7/5 also yields Black win, but it needs more moves though the same winning pattern.

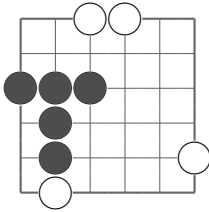
- if 4 elsewhere, Black wins by $\langle 7 \rightarrow 6 \rangle$
- if 2 elsewhere, Black wins by $\langle 3 \rightarrow (2; B; 6) \rangle$

7/3 is met by White e.



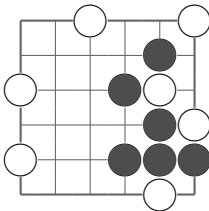
[C13_(c154)] Black to play and win.

Hint: Where is the final 4-3? It's the neighbor of a White stone.



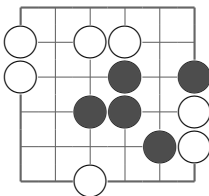
[C14_(c076)] Black to play and win.

Hint: There are two half-open Threes. Decide whether 4-move should be done.



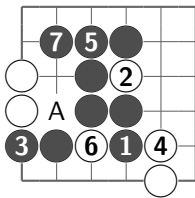
[C15_(c230)] Black to play and win.

Hint: The decisive move surprises you, doesn't it?



[C16_(c071)] Black to play and win.

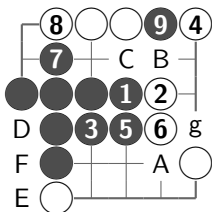
Hint: It seems easy, but is difficult in fact. You should not permit such defenses which use forbidden 4-4.



[C13 Ans] Black wins by $\langle 7 \rightarrow A \rangle$.

- same wherever 6
- if 4 elsewhere, Black wins at 4 or 6, or wins by $\langle 7 \rightarrow A \rangle$
- if 2 elsewhere, Black wins at 2

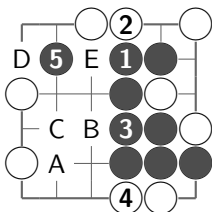
4/1 is met by White 7, 5/1 by 6, 6/1 by 5 and 7/1 by 4.



[C14 Ans] Black wins by $\langle 9 \rightarrow A \text{ or } (B;C) \rangle$, where A is open Four.

- '4-move 8' / 6 yields the same result. same if D/6.
- if 4 elsewhere, Black wins by $\langle 5 \rightarrow 7 \rangle$

3/1 is met by White 1 and 5/1 by 8.



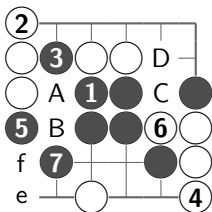
[C15 Ans] Black wins by $\langle 5 \rightarrow (A;B;C;D) \rangle$.

White 4-move against 5 is ineffective.

5 is not 3-3 because spot E is 4-4.

- if 2 elsewhere, Black wins at E

3/1 is met by White 1 and 5/3 by 3.

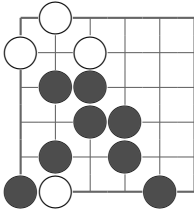


[C16 Ans] Black wins by $\langle 7 \rightarrow A \rangle$.

- if 6 elsewhere, Black wins by $\langle 7 \rightarrow B \rangle$ or $\langle D \rightarrow C \rangle$ or $\langle D \rightarrow 6 \rangle$ or (A;B) or (C;6)
- if 2 elsewhere, Black wins by $\langle D \rightarrow C \rangle$

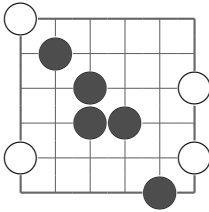
D/1 is met by White e, and next 1 and C are met by White 4-move f. D/3 is met by White 4-move f

followed by 7. 5/3 is met by White 4-move 3 followed by 7. 7/3 is met by White 4-move f and D followed by 4. B/3 is met by White A-etc.



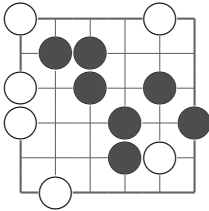
[C17_(c023)] Black to play and win.

Hint: Change the 4-3-3 spot to 4-3.



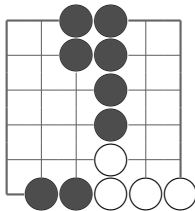
[C18_(c153)] Black to play and win.

Hint: Black plays actively around the board.



[C19_(c052)] Black to play and win.

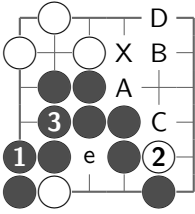
Hint: White may defend by making a forbidden spot.



[C20_(m1a)] Black to play and win.

Note that stones form the shape of '1'.

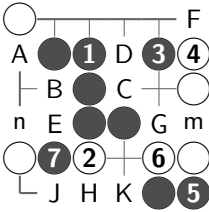
Hint: Attack so that you don't make Overline candidates any more.



[C17 Ans] Black wins by $\langle 3 \rightarrow A \rangle$.
A is 4-3, because spot X is 4-4 after A is played.

- if 2 elsewhere, Black wins in the same way, or wins by $(2;B;C)$

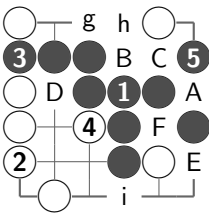
3/1 is met by White C. Black 4-move D after 3 is a fault due to White Nori-move against Black A.



[C18 Ans] Black wins by $\langle 7 \rightarrow (A;B) \text{ or } (C;D) \rangle$.
White 4-move F blocks $(A;B)$, but generates new 4-3 spot E.

- if 4 elsewhere, Black wins by $(6;G)$
- if 2 elsewhere, Black wins in the same way, or wins by $\langle 3 \rightarrow (6;G) \text{ or } (5;H;J;A;B;7) \rangle$
($(5;H;K;D;C;7)$ is also possible)

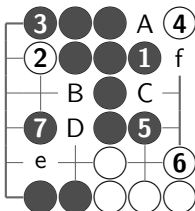
G/1 is met by White m, and next 4 by White 3. E/1 is met by White n-etc and G/3 by m.



[C19 Ans] Black wins by $\langle 5 \rightarrow A \text{ or } B \rangle$, where B is open Four.

- if 4 elsewhere, Black wins by $(D;4)$ or $(D;4;C)$ or $\langle 4 \rightarrow C \rangle$
- if B/2, Black wins by $\langle E \rightarrow A \text{ or } (F;4) \rangle$
(# Black F is met by White g).
if '3 followed by h or i'/2, Black wins by $(B;5;A)$

3/1 is met by White 1. 4/1 is met by White g, and next 1 by White B.

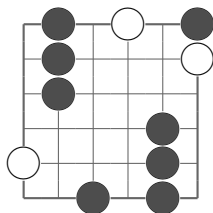


[C20 Ans] Black wins by $\langle 7 \rightarrow (A;B;C) \rangle$.

- if 4 elsewhere, Black wins by $\langle D \rightarrow 5 \rangle$
- if 2 elsewhere, Black wins by D (White e, otherwise $(e;2;7)$) followed by $\langle 3 \rightarrow 5 \rangle$

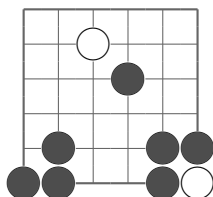
3/1 is met by White 4, and next 1 by White f. A/1 is met by White 3 and D/3 by 4.

5 VCF Problems



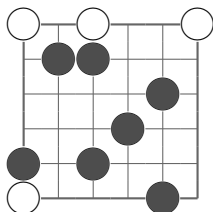
[D01_(d012)] Black to play and win by continuous Fours.

Hint: VCF sequence is 6 in length. It is rather short, but it has some branch roads.



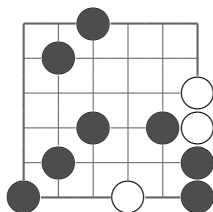
[D02_(d005)] Black to play and win by continuous Fours.

Hint: Nori-move waits you in some route. VCF sequence is 7 in length.



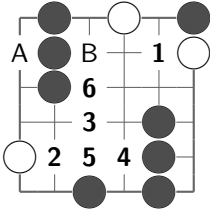
[D03_(d007)] Black to play and win by continuous Fours.

Hint: Easy to look ahead, maybe. VCF sequence is 7 in length.



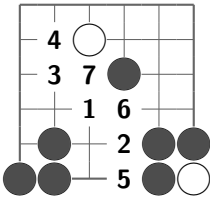
[D04_(d008)] Black to play and win by continuous Fours.

Hint: Decide the second move correctly. VCF sequence is 7 in length.



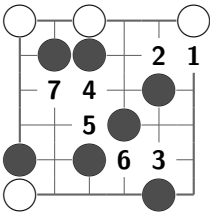
[D01 Ans] Black wins by (1;2;...;6).

(1;2;3;A;B;6) suffers Nori-move on the way.



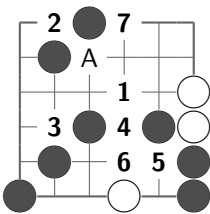
[D02 Ans] Black wins by (1;2;...;7).

4 after 3 avoids Nori-move and makes a correct way.



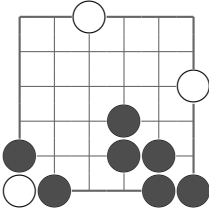
[D03 Ans] Black wins by (1;2;...;7).

The sequence is straight.



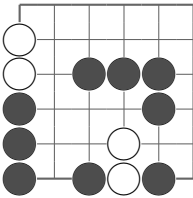
[D04 Ans] Black wins by (1;2;...;7).

if A/2, some Fours can be made, but that's all.



[D05_(d013)] Black to play and win by continuous Fours.

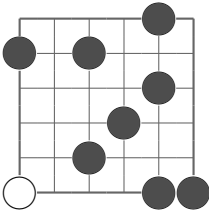
Hint: VCF sequence is 8 in length. A certain sequence seems correct, but it's fake.



[D06_(m12a)] Black to play and win by continuous Fours.

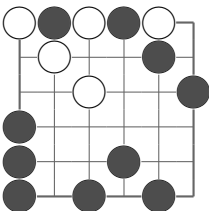
Note that stones form the shape of digit sequence '12'. This was made for celebrating new year of 2012.

Hint: VCF sequence is 8 in length.



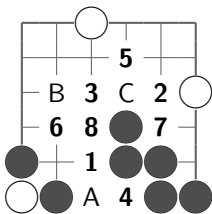
[D07_(d006)] Black to play and win by continuous Fours.

Hint: VCF sequence is 8 in length. Open Four is made at last.



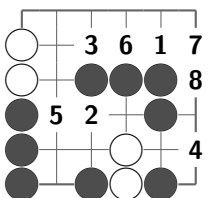
[D08_(d011)] Black to play and win by continuous Fours.

Hint: VCF sequence is 9 in length, and total number of stones in problem diagram is 15. ' $15 + 9 * 2 + 3 = 6^2$ ' shows that this problem is ...



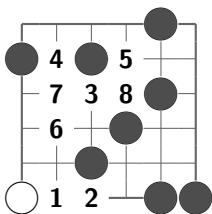
[D05 Ans] Black wins by (1;2;...;8).

(1;2;3;A;8;B;C;5) followed by 6 or 7 seems correct, but horizontal 'Three' is fake due to 4-4.



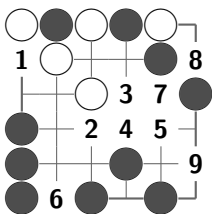
[D06 Ans] Black wins by (1;2;...;8).

The shape of '1' is a little long, but this makes VCF sequence longer.



[D07 Ans] Black wins by (1;2;...;8).

There is few variations.



[D08 Ans] Black wins by (1;2;...;9).

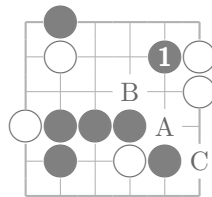
This problem is **complete**⁹, as you understand after you have solved it. .

⁹ If no empty spots remain when one has solved a problem by putting stones until final Five, the problem is called 'complete'.

References

- [1] Mano,Y.: “Introduction to 6×6-Board Renju Problems (1)&(2)”, The Renju Sekai, Vol.57 No.11&12, Nov.&Dec.2011 (in Japanese).
- [2] Web site on 6×6-Board Renju Problems, <http://www016.upp.so-net.ne.jp/TokaiRenju2/JirTa/xxx> (where xxx=6x6J.htm in Japanese, or 6x6E.htm in English).
- [3] Mano,Y.: “6×6-Board Renju Problems – Collection-1”, Tokai Renju Association in Japan, Nov.2011 (2nd ed. Dec.2012) (in Japanese).
- [4] Mano,Y.: “6×6-Board Renju Problems – Collection-2~5”, Tokai Renju Association in Japan, Mar.~Dec.2012 (in Japanese).

Solution to the front cover problem



After 1, Black wins by 4-3 at A, or wins by Continuous Fours of (B;A;C).

