

# Examples for Area Scoring - Part 1

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## Preface

### Procedure

Before the scoring, only one phase is used - the alternation. Only 2 passes end it. Procedurally this is the simplest possible combination. Functionally an alternation is [ee..err..rpp], where e are endgame moves, r are playout moves to perform removals, and p are passes.

It is possible to alter the rules by adding an optional agreement phase and, in case of disagreement, the playout, which also ends with 2 passes. If the alternation is stopped at a competent moment, then it is [ee..epp] in case of agreement and the removals are done rather informally. In case of disagreement, alternation and playout become [ee..eprr..rpp]. I.e. as far as the sequence of moves is concerned, only 2 passes are inserted in between the alternation and the playout.

The rules used here are sufficient to show how removals are done in case of a disagreement under enhanced rules: by alternating moves.

### Scoring and Counting

In this document, the scoring is simply indicated by the scoring intersections: square for Black, triangle for White. Intersections surrounded partly by black stones, partly by white stones are treated as not scoring. It would be equal to score them for both players or to divide them between both players.

Some counting method could be applied to calculate the score mechanically. In particular, there are counting methods where it is sufficient to count only one player's and the not scoring intersections.

### Variations

Variations are shown regardless of whether they are common for advanced players. In easy positions they tend to use easy variations - in complex positions their preference varies. The rules do not prescribe a particular variation and they do not require perfect play. The players choose a variation and they may make strategic mistakes during the alternation.

For each example further variations would be possible that are not shown.

## Contents

Emphasis is on scoring. For most examples, the previous part of the alternation, the result, and the winner are not shown.

## Rules

- A move is either a play or a pass.
- Suicide is prohibited.
- Positional Superko: A play may not recreate any earlier position of the game.
- The game consists of the following phases: 1) alternation, 2) scoring.
- The alternation ends with 2 successive passes.
- Area Scoring: A player's score is the number of his stones on the board plus the number of empty intersections surrounded only by his stones.

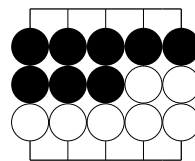
## Regular Divided Or Semi-Divided Positions

### Characterization

In practice, typically the positions are without value of sente, basic endgame kos, and two-sided dame.

*Remarks for the theoretically interested reader: A position is "divided" if each perfect play leads to a final position with the same intersections scoring for or - this extra condition is superfluous under Area Scoring - being occupied by stones of Black, White, or neither player. "Regular" means that previous ko restrictions or previously started parts of long cycles do not play a role and that no stones are removed from intersections that do not score in the final position. "Regular semi-divided positions" are those where either player needs to force his opponent to get a regular divided position with always the same intersections scoring for or being occupied by stones of Black, White, or neither player but where both players have also other perfect play available.*

### Example 1



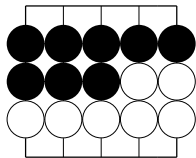
## General Information

- diagram index: 0000
- traditional description: "basic territories"
- board size: 5x5
- board parity: odd
- black - white stones: 1
- to move: White
- frequency: 1:1 to 1:10
- total reading time: <1m
- perfect play score: 1

## Variation 1

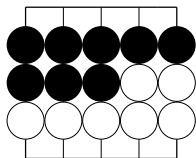
This is a possible perfect play.

### Alternation

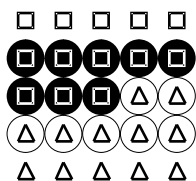


① pass, ② pass.

### Position at the End of the Alternation



### Scoring

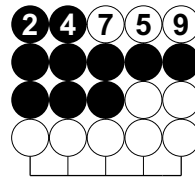


$$13 - 12 = 1$$

## Variation 2

This is a possible variation. Move 4 is a strategic mistake.

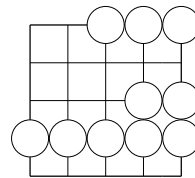
### Alternation



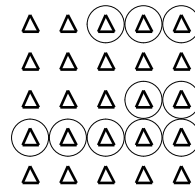
① pass, ③ pass,  
⑥ pass, ⑧ pass,  
⑩ pass, ⑪ pass.

Black may not take back his move 4. In Go, moves may not be taken back.

### Position at the End of the Alternation



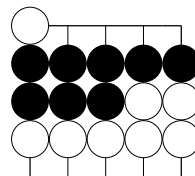
### Scoring



$$0 - 25 = -25$$

White wins by 25 points. This is the consequence of Black's strategic mistake.

## Example 2



## General Information

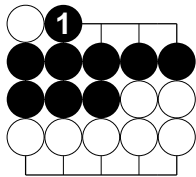
- diagram index: 0001
- traditional description: "basic territories and dead stone"
- board size: 5x5

- board parity: odd
- black - white stones: 0
- to move: Black
- frequency: 1:1 to 1:10
- total reading time: <1m
- perfect play score: 1

### Variation 1

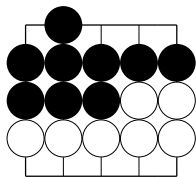
This is a possible perfect play.

#### Alternation

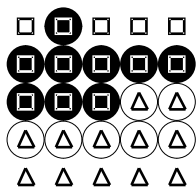


② pass, ③ pass.

#### Position at the End of the Alternation

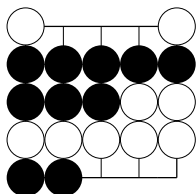


#### Scoring



$$13 - 12 = 1$$

### Example 3



### General Information

- diagram index: 0002

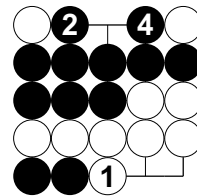
- traditional description: "basic territories and dead stones"
- board size: 5x5
- board parity: odd
- black - white stones: 1
- to move: White
- frequency: 1:1 to 1:10
- total reading time: <1m
- perfect play score: 1

*Remark for the theoretically interested reader: The example has a regular semi-divided position.*

### Variation 1

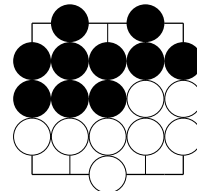
This is a possible perfect play.

#### Alternation

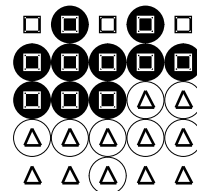


③ pass, ⑤ pass,  
⑥ pass.

#### Position at the End of the Alternation



#### Scoring

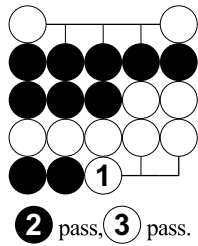


$$13 - 12 = 1$$

### Variation 2

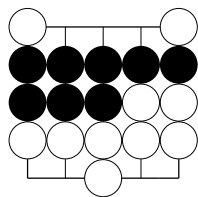
This is a possible variation. Move 2 is a strategic mistake.

### Alternation

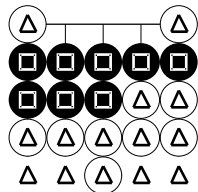


Black may not take back his move 2. In Go, moves may not be taken back.

### Position at the End of the Alternation



### Scoring



$$8 - 14 = -6$$

The unmarked empty intersections score for neither player.

White wins by 6 points. This is the consequence of Black's strategic mistake.

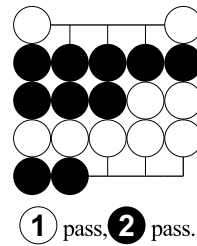
### Variation 3

This is a possible perfect play. By coincidence, move 1 is not a strategic mistake because the score after the end of this variation is the same as the score after variation 1 and because either player could force something like variation 1 by starting with approaching liberties and removing stones and thereby forcing the opponent to do likewise.

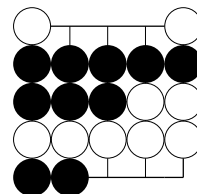
If the rules should provide the phases alternation, agreement, and playout, then, in a regular semi-divided position like in this example, either of the two successive passes stopping the alternation could not be a strategic mistake because removals can occur during either the agreement or the playout. Then if removals

should not be done also during the playout, then the passes during the playout are associated with the burden to decide whether they might be strategic mistakes.

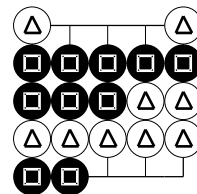
### Alternation



### Position at the End of the Alternation



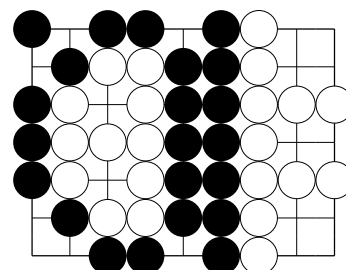
### Scoring



$$10 - 9 = 1$$

The unmarked empty intersections score for neither player.

### Example 4



### General Information

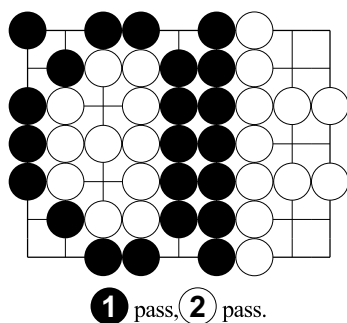
- diagram index: 0003
- traditional description: "false eyes"

- board size: 9x7
- board parity: odd
- black - white stones: 0
- to move: Black
- frequency: 1:1,000 to 1:100,000
- total reading time: <1m
- perfect play score: -5

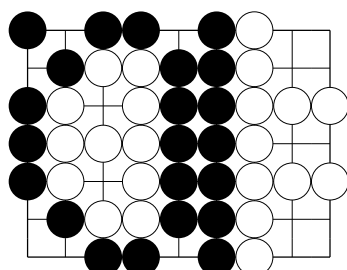
## Variation 1

This is a possible perfect play.

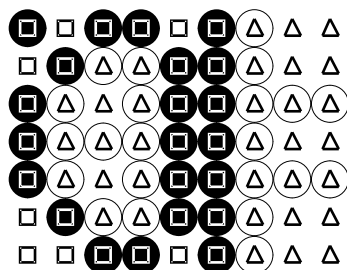
### Alternation



### Position at the End of the Alternation



### Scoring



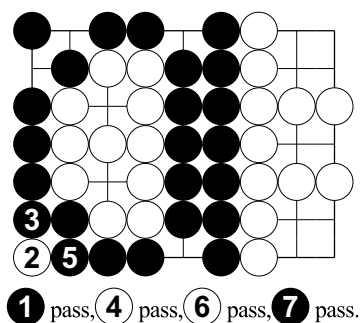
$$29 - 34 = -5$$

## Variation 2

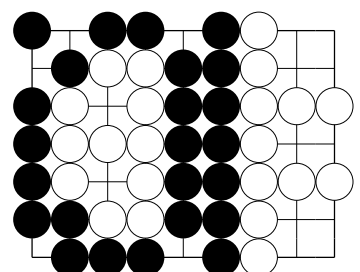
This is a possible perfect play. If White expects Black to answer correctly, he would rather not choose this

variation and not test Black's basic strategic skills. Beginners might prefer to choose this variation.

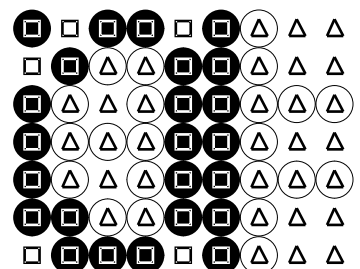
### Alternation



### Position at the End of the Alternation

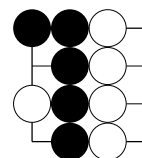


### Scoring



$$29 - 34 = -5$$

## Example 5



## General Information

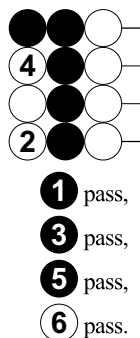
- diagram index: 0004
- traditional description: "nakade"
- board size: 4x4
- board parity: even

- black - white stones: 0
- to move: Black
- frequency: 1:1 to 1:10
- total reading time: <1m
- perfect play score: -16

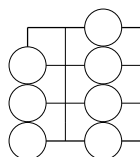
### Variation 1

This is a possible perfect play.

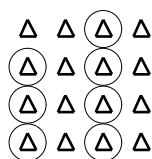
#### Alternation



#### Position at the End of the Alternation



#### Scoring

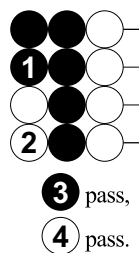


$$0 - 16 = -16$$

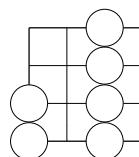
### Variation 2

This is a possible perfect play.

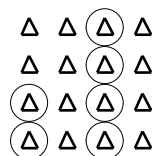
#### Alternation



#### Position at the End of the Alternation

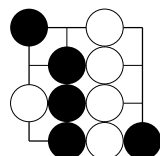


#### Scoring



$$0 - 16 = -16$$

### Example 6



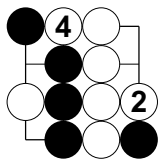
#### General Information

- diagram index: 0007
- traditional description: "capturable living stone in basic territory and dead stones"
- board size: 4x4
- board parity: even
- black - white stones: 0
- to move: Black
- frequency: 1:1 to 1:10
- total reading time: <1m
- perfect play score: -16

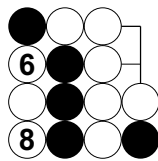
### Variation 1

This is a possible perfect play.

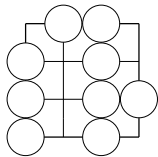
## Alternation



1 pass,  
3 pass.

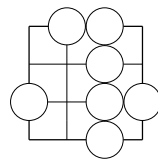


5 pass,  
7 pass.

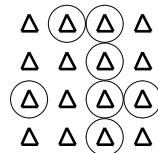


9 pass,  
10 pass.

## Position at the End of the Alternation

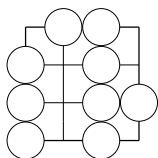


## Scoring

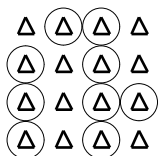


$$0 - 16 = -16$$

## Position at the End of the Alternation

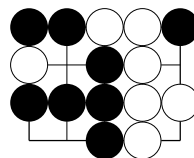


## Scoring



$$0 - 16 = -16$$

## Example 7



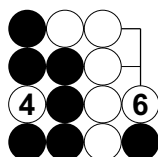
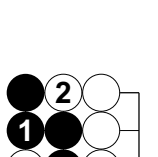
## General Information

- diagram index: 0005
- traditional description: "snapback and dead stone"
- board size: 5x4
- board parity: even
- black - white stones: 1
- to move: White
- frequency: 1:1 to 1:100
- total reading time: <1m
- perfect play score: 2

## Variation 2

This is a possible perfect play.

## Alternation

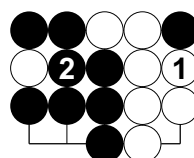


5 pass,  
7 pass,  
8 pass.

## Variation 1

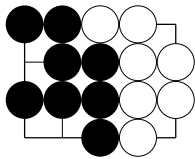
This is a possible perfect play.

## Alternation

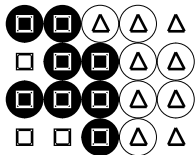


3 pass, 4 pass.

### Position at the End of the Alternation



### Scoring

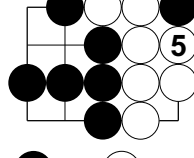
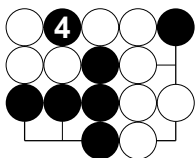
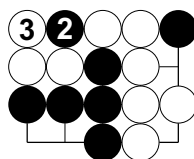
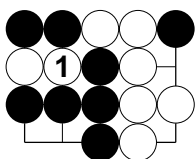


$$11 - 9 = 2$$

### Variation 2

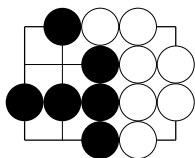
This is a possible perfect play.

### Alternation

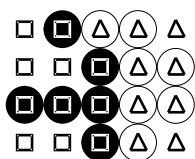


6 pass, 7 pass.

### Position at the End of the Alternation

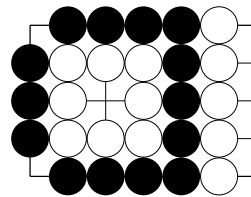


### Scoring



$$11 - 9 = 2$$

### Example 8



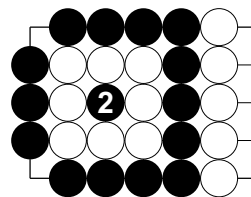
### General Information

- diagram index: 0006
- traditional description: "basic territories"
- board size: 7x5
- board parity: odd
- black - white stones: 1
- to move: White
- frequency: 1:1 to 1:10
- total reading time: <1m
- perfect play score: 15

### Variation 1

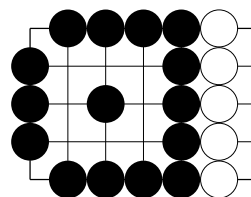
This is a possible perfect play.

### Alternation



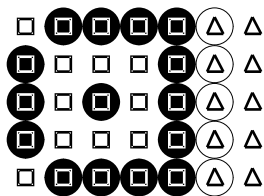
1 pass, 3 pass, 4 pass.

### Position at the End of the Alternation



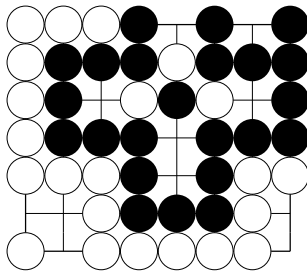


## Scoring



$$25 - 10 = 15$$

## Example 9



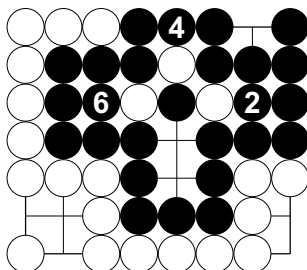
## General Information

- diagram index: 0008
- traditional description: "capturable-2 stone"
- board size: 8x7
- board parity: even
- black - white stones: 1
- to move: White
- frequency: 1:1,000 to 1:100,000
- total reading time: <1m
- perfect play score: 8

## Variation 1

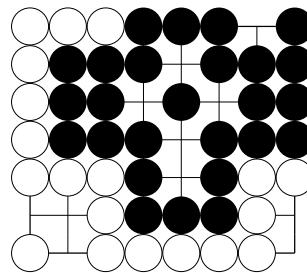
This is a possible perfect play.

## Alternation

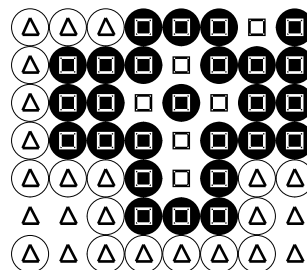


① pass, ③ pass, ⑤ pass,  
⑦ pass, ⑧ pass.

## Position at the End of the Alternation



## Scoring

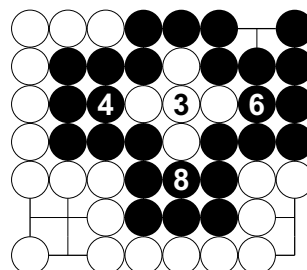
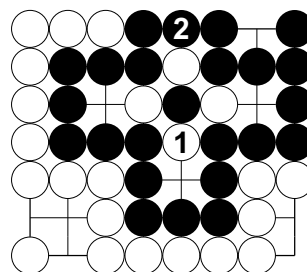


$$32 - 24 = 8$$

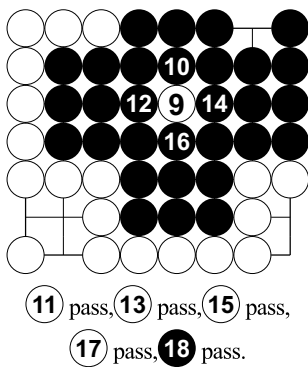
## Variation 2

This is a possible perfect play.

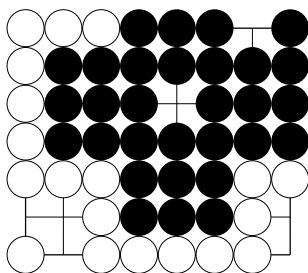
## Alternation



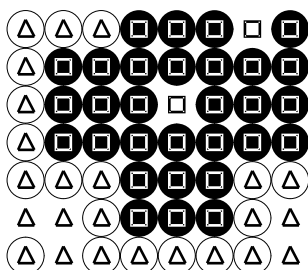
⑤ pass, ⑦ pass.



#### Position at the End of the Alternation

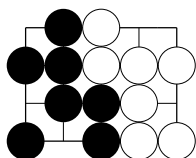


#### Scoring



$$32 - 24 = 8$$

#### Example 10



#### General Information

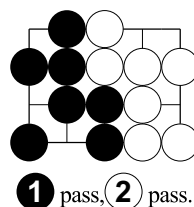
- diagram index: 0009
- traditional description: "basic territories"
- board size: 5x4
- board parity: even
- black - white stones: 0
- to move: Black
- frequency: 1:1 to 1:10

- total reading time: <1m
- perfect play score: 0

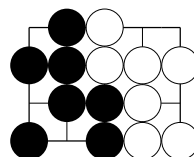
#### Variation 1

This is a possible perfect play.

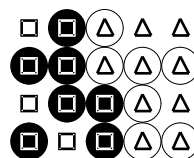
#### Alternation



#### Position at the End of the Alternation



#### Scoring

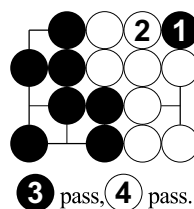


$$10 - 10 = 0$$

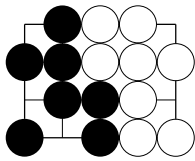
#### Variation 2

This is a possible perfect play.

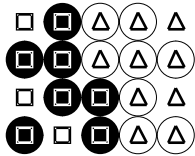
#### Alternation



### Position at the End of the Alternation

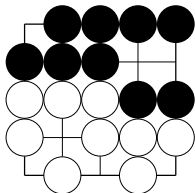


### Scoring



$$10 - 10 = 0$$

### Example 11



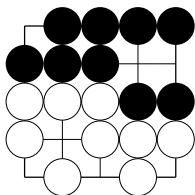
### General Information

- diagram index: 0010
- traditional description: "basic territories"
- board size: 5x5
- board parity: odd
- black - white stones: 0
- to move: Black
- frequency: 1:1 to 1:10
- total reading time: <1m
- perfect play score: -1

### Variation 1

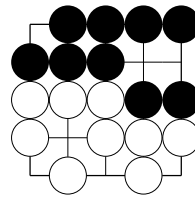
This is a possible perfect play.

### Alternation

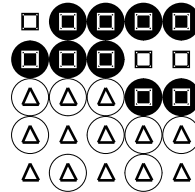


① pass, ② pass.

### Position at the End of the Alternation



### Scoring

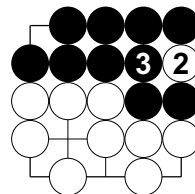


$$12 - 13 = -1$$

### Variation 2

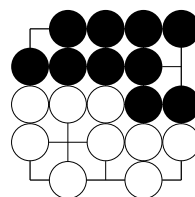
This is a possible perfect play.

### Alternation

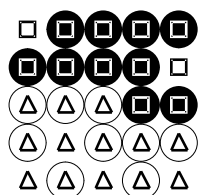


① pass, ④ pass,  
⑤ pass.

### Position at the End of the Alternation

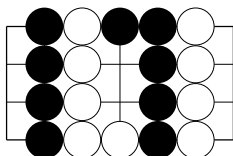


## Scoring

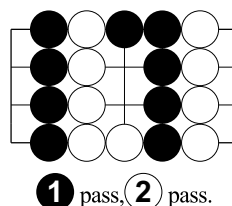


$$12 - 13 = -1$$

## Example 12

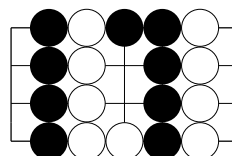


## Alternation



1 pass, 2 pass.

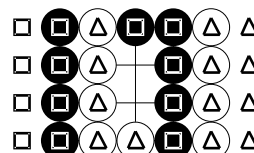
## Position at the End of the Alternation



## General Information

- diagram index: 0011
- traditional description: "symmetrical even stable seki"
- board size: 7x4
- board parity: even
- black - white stones: 0
- to move: Black
- frequency: 1:1 to 1:100
- total reading time: <1m
- perfect play score: 0

## Scoring



$$13 - 13 = 0$$

The unmarked empty intersections score for neither player.

## Remarks

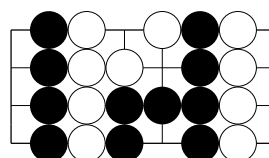
"Symmetrical" means that each side in the seki has an equal number of intersections in so called eyes. "Even" means that the number of so called neutral points in the seki has the parity even. "Stable" means that stones cannot be captured from within the seki. In the present context of Area Scoring, "seki" is a purely informal strategic term for coexisting life.

Precise figures for frequency of sekis are hardly known yet. Apparently sekis occur much less frequently in Japanese professional games than in Korean professional games or amateur games. Playing style plays an important role here.

## Variation 1

This is a possible perfect play.

## Example 13



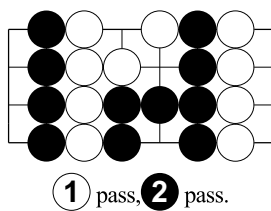
## General Information

- diagram index: 0012
- traditional description: "symmetrical odd stable seki"
- board size: 8x4
- board parity: even
- black - white stones: 1
- to move: White
- frequency: 1:1 to 1:100
- total reading time: <1m
- perfect play score: 1

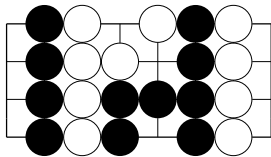
## Variation 1

This is a possible perfect play.

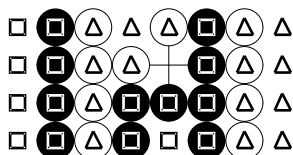
## Alternation



## Position at the End of the Alternation



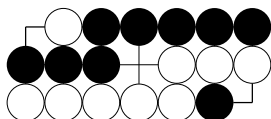
## Scoring



$$16 - 15 = 1$$

The unmarked empty intersection scores for neither player.

## Example 14



## General Information

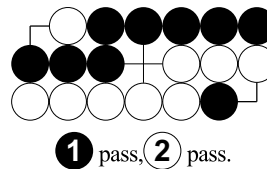
- diagram index: 0013
- traditional description: "symmetrical odd seki with dead stones"
- board size: 7x3
- board parity: odd
- black - white stones: 0
- to move: Black
- frequency: 1:10 to 1:1,000
- total reading time: <1m
- perfect play score: 0

*Remark for the theoretically interested reader: The example has a regular semi-divided position.*

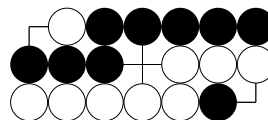
## Variation 1

This is a possible perfect play.

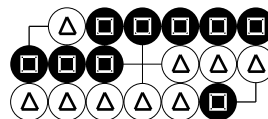
## Alternation



## Position at the End of the Alternation



## Scoring



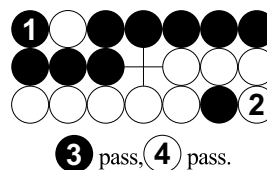
$$9 - 9 = 0$$

The unmarked empty intersections score for neither player.

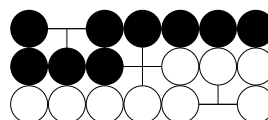
## Variation 2

This is a possible perfect play.

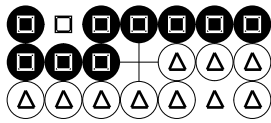
## Alternation



## Position at the End of the Alternation



### Scoring



$$10 - 10 = 0$$

The unmarked empty intersection scores for neither player.