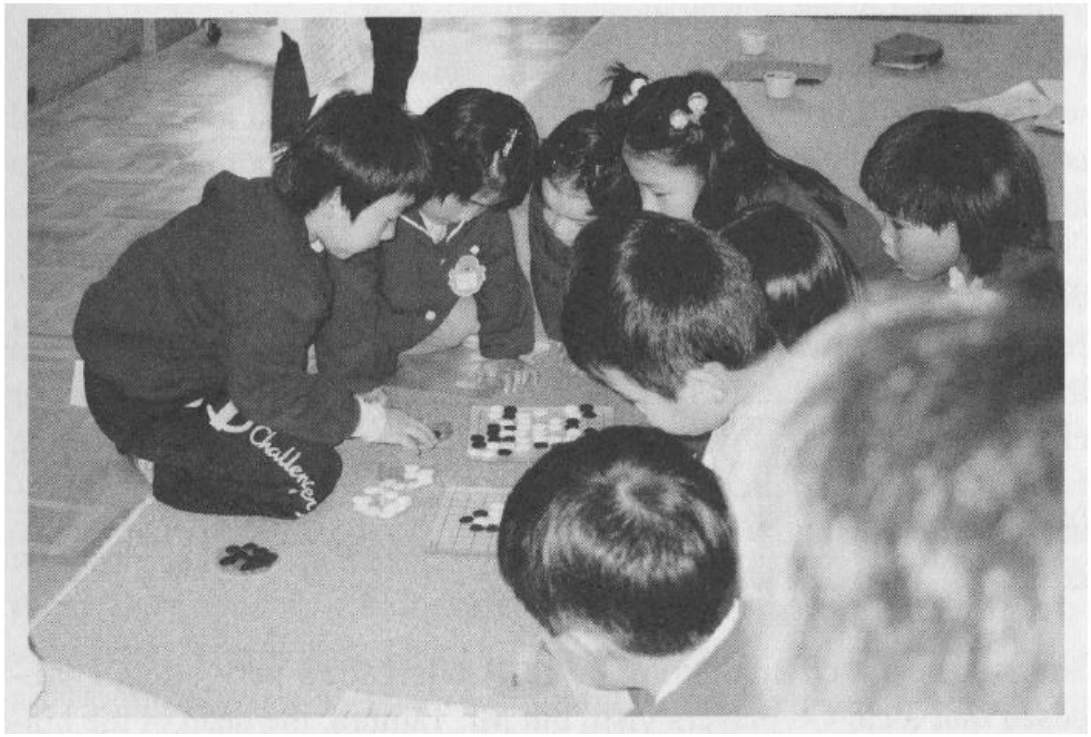
# Atari Go




Carlos P. Santos, Center for Mathematics and Applications (NovaMath), FCT NOVA, Portugal

Carlos P. Santos' work is funded by national funds through the FCT, I.P., under the scope of the projects UIDB/00297/2020 and UIDP/00297/2020 (Center for Mathematics and Applications).

NOVAMATH
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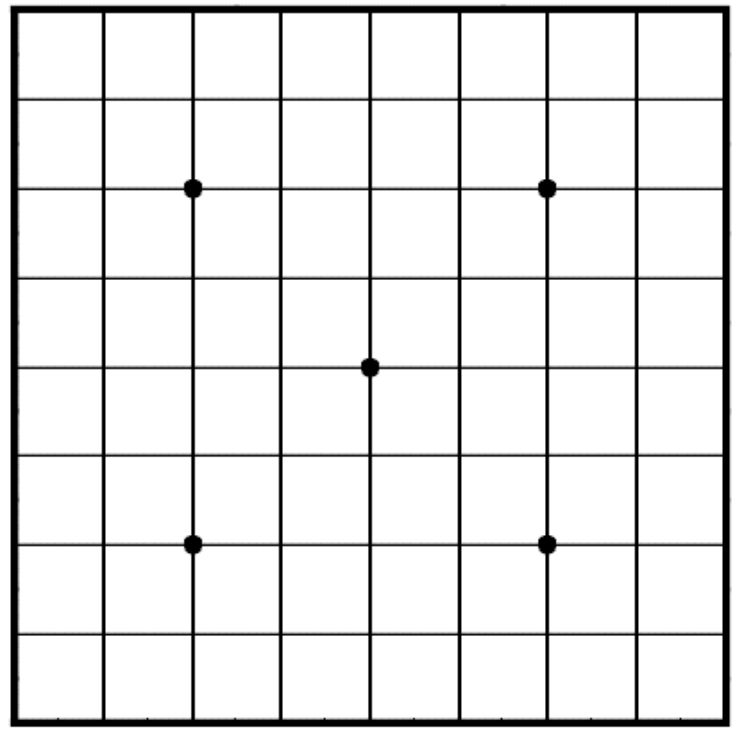
# 1. Rules of ATARI GO



Two stones of the same color are **connected** if it is possible to draw a path from one to the other passing only through stones of that color. The path must be a polygonal line composed only of horizontal and vertical segments.

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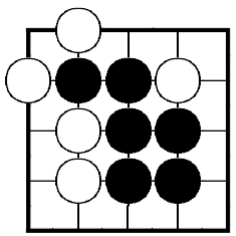

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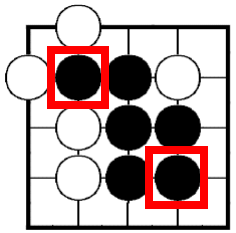

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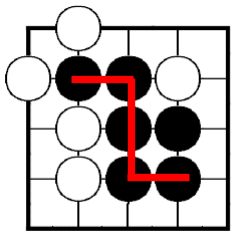

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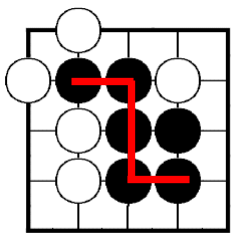

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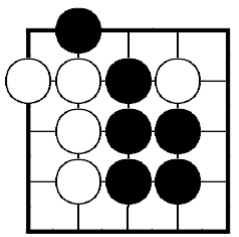

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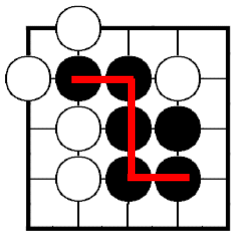

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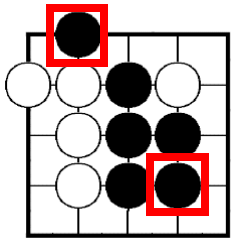

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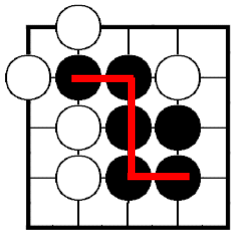

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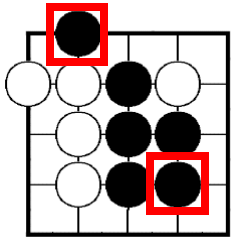

disconnected

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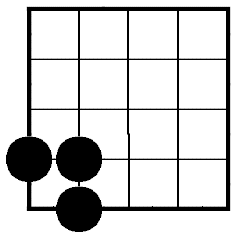

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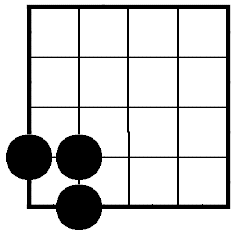

1 group

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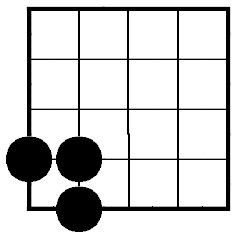

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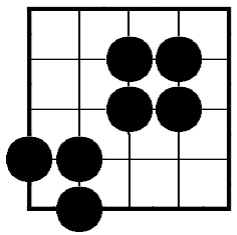

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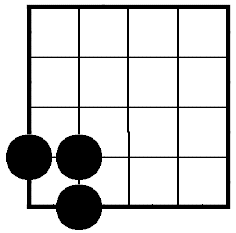

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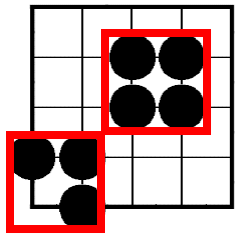

2 groups

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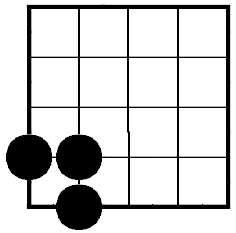

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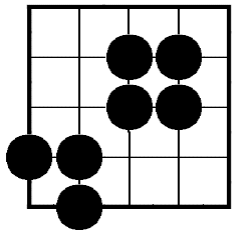

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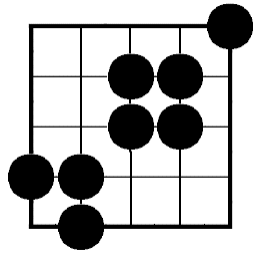

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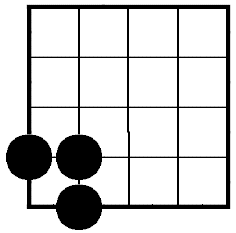

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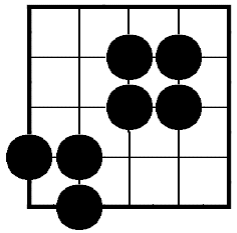

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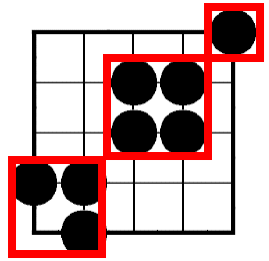

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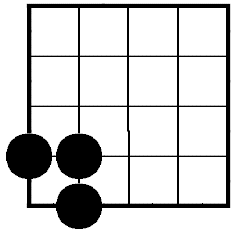

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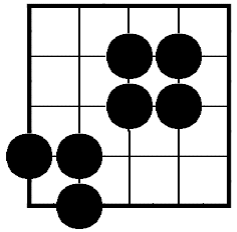

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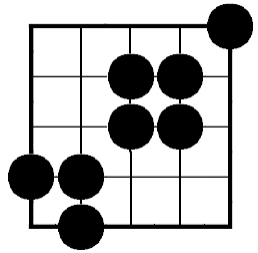

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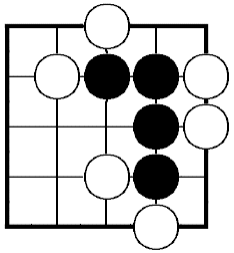

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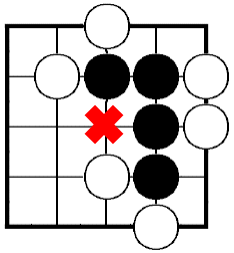

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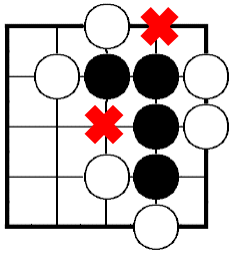

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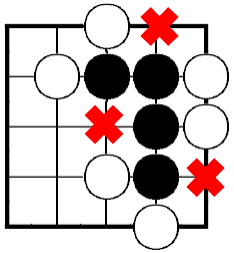

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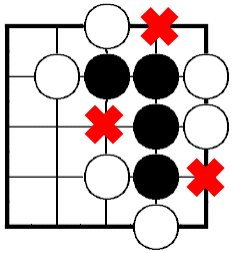

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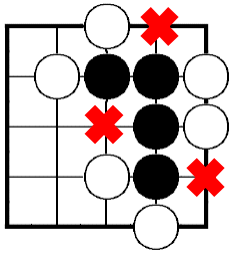

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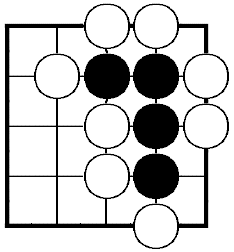

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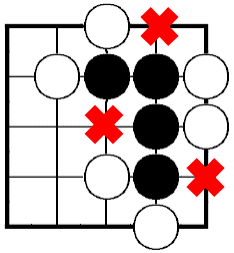

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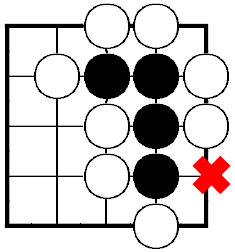

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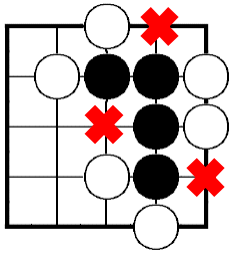

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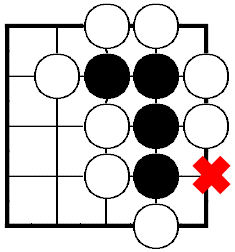

1 liberty

**Board and pieces**: At the beginning of the game, a grid board is empty. The dimensions of the board must be agreed upon by the players (a 9x9 board is a good choice for beginners). During the game, black and white stones are placed on the board, at the intersections of the lines.

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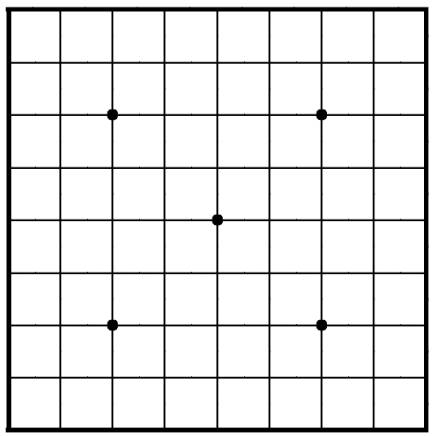
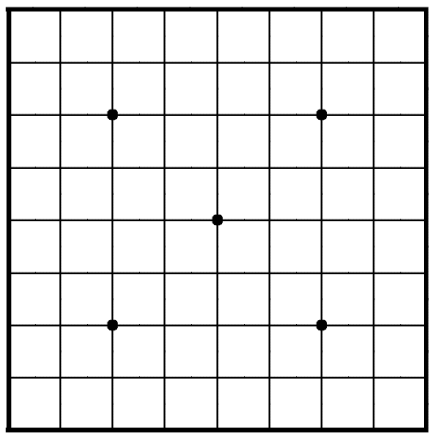
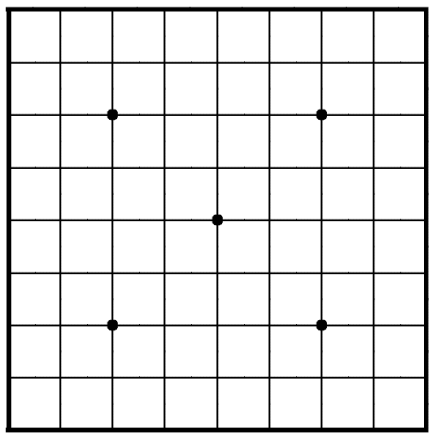


**Turns**: One of the players places black stones on the board, and the other places white stones. The player with the black stones plays first. The players alternate thereafter.



**Moves**: On their turn, a player may place a stone of their color on an empty intersection.



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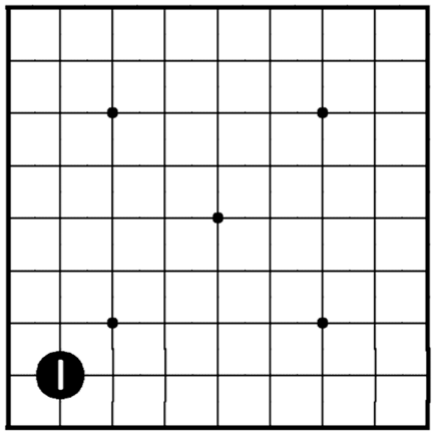

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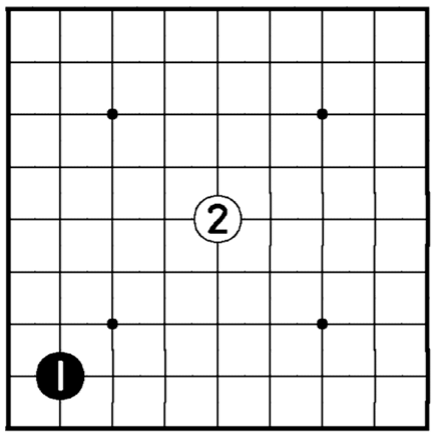

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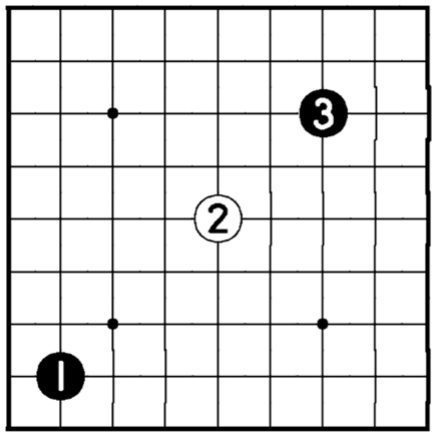

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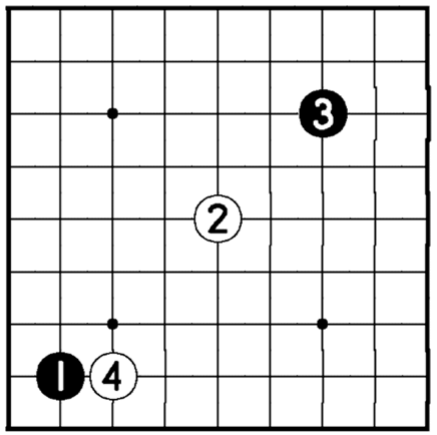

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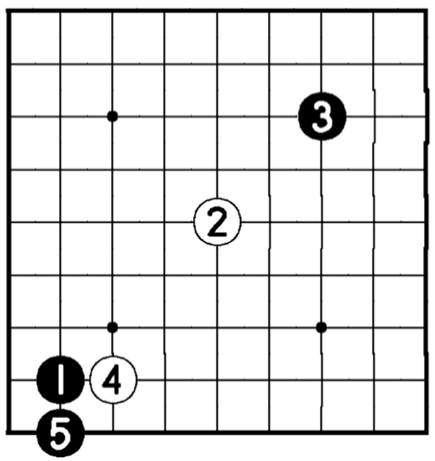

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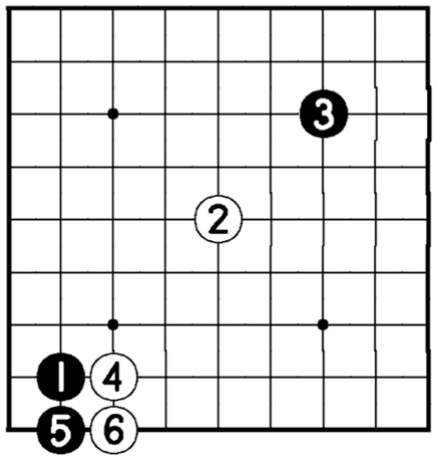

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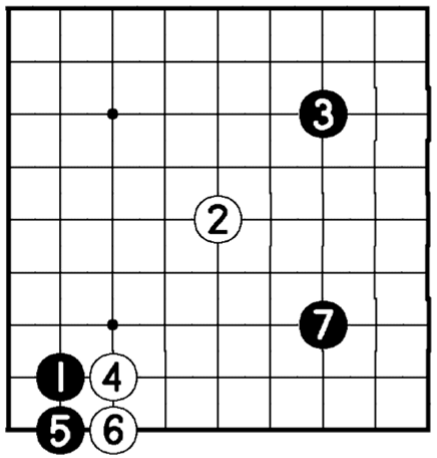

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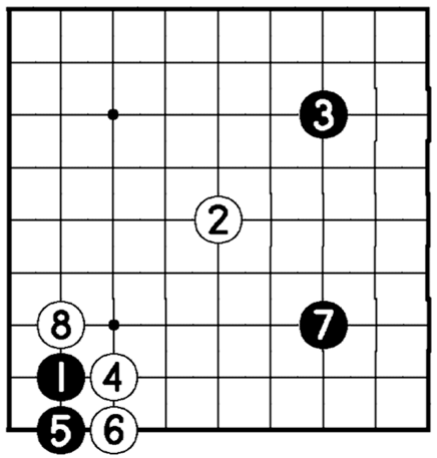

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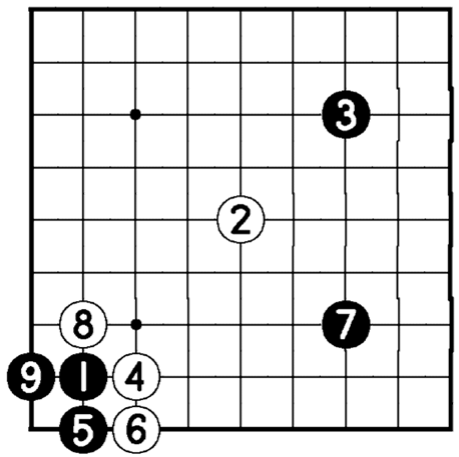

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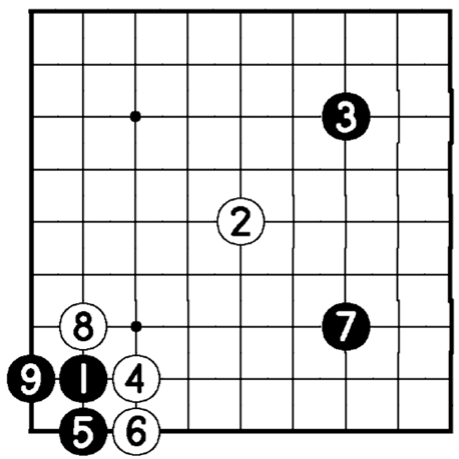

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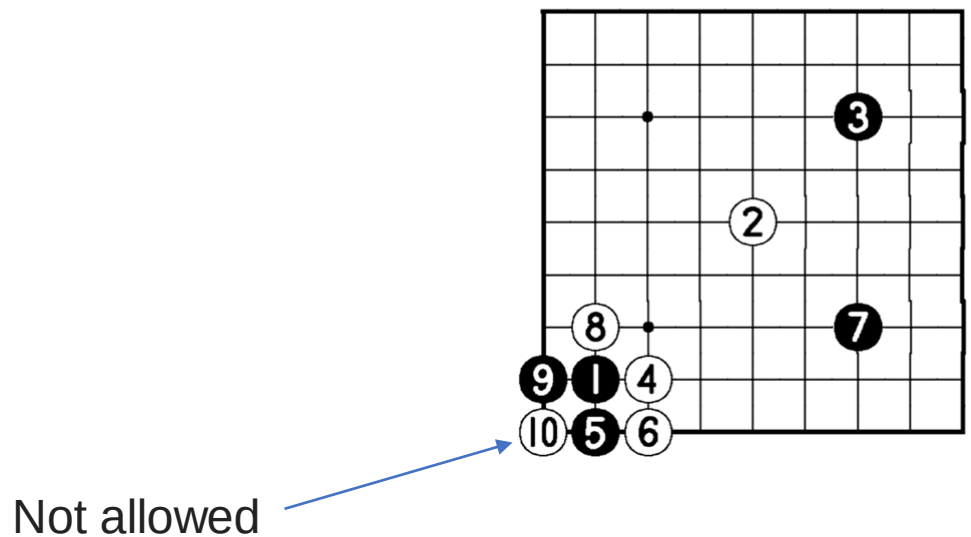

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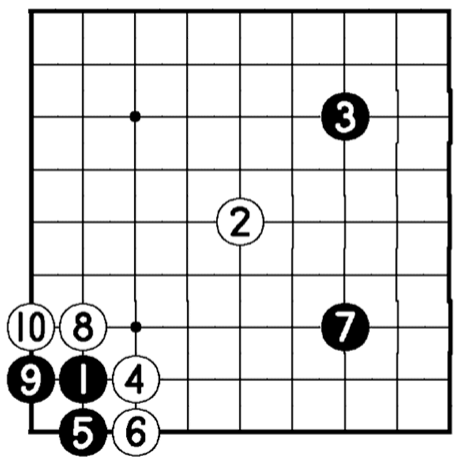

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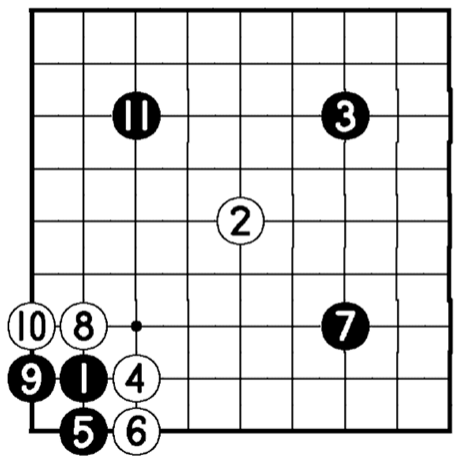

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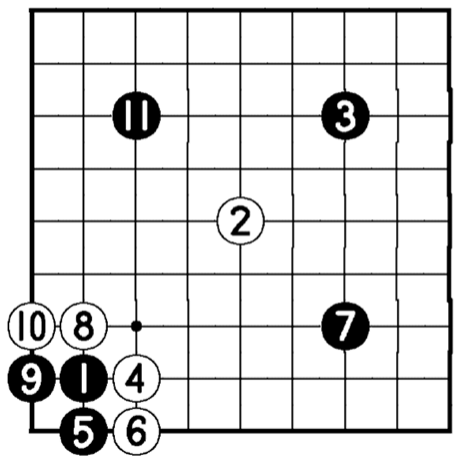
**Capture**: When a player's move removes the liberties from an opponent's group, that group is captured.



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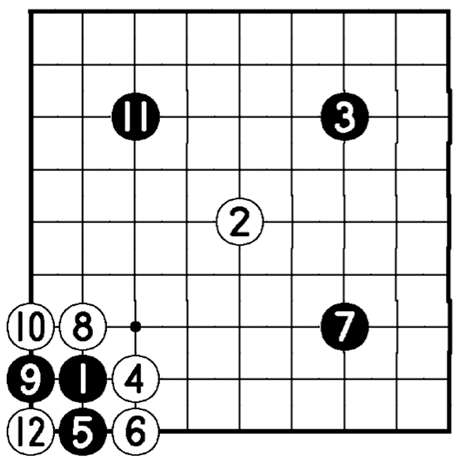

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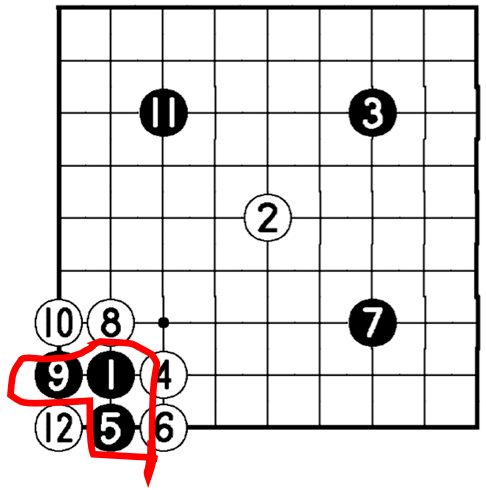

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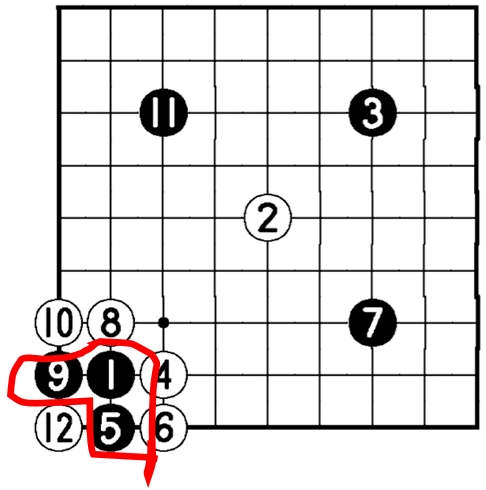
**Winning condition**: The winner is the player who makes the first capture or leaves the opponent without legal moves.



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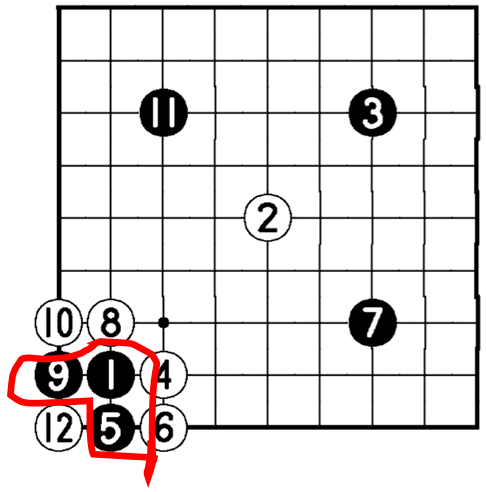
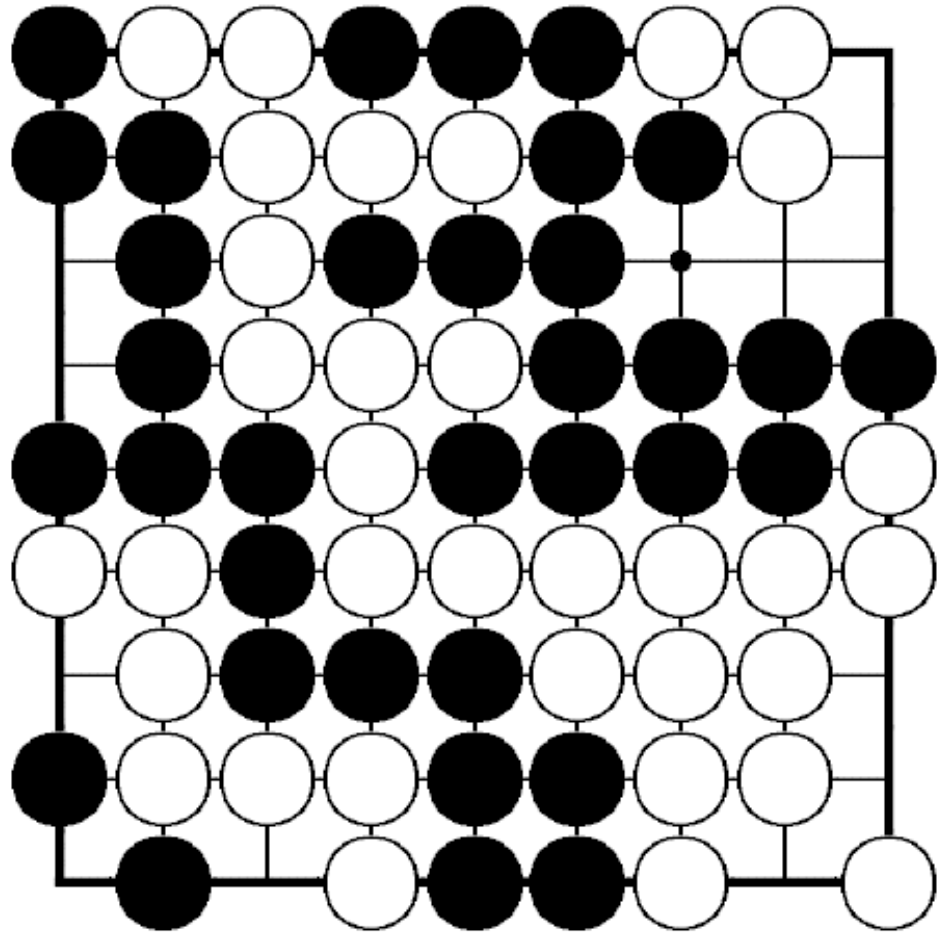
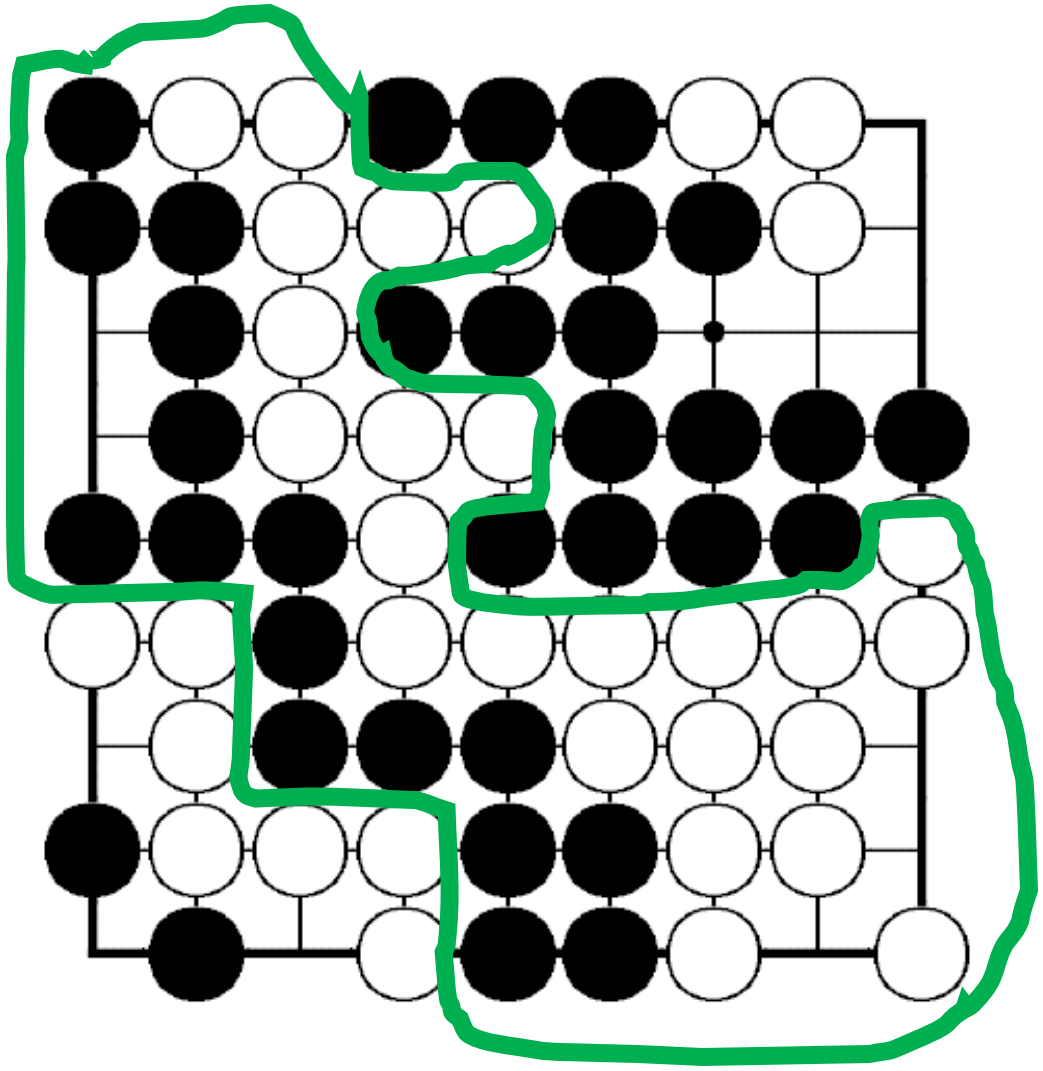
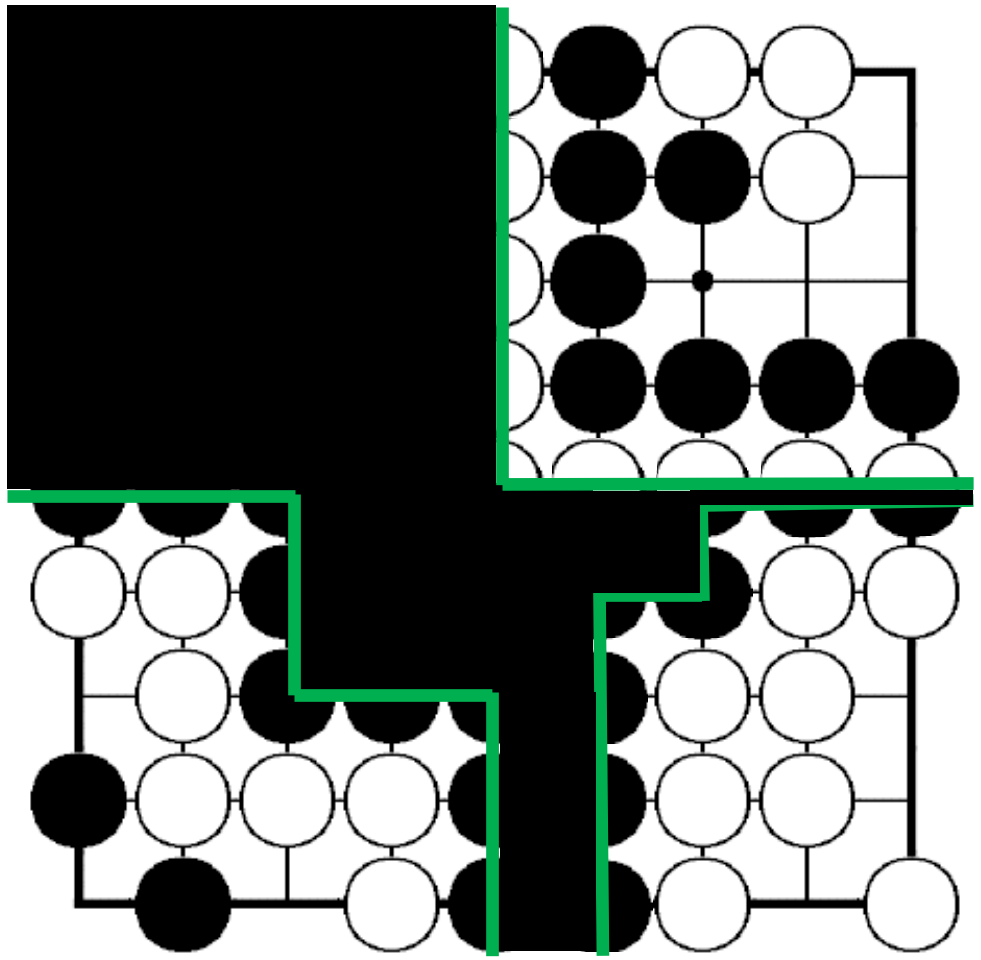


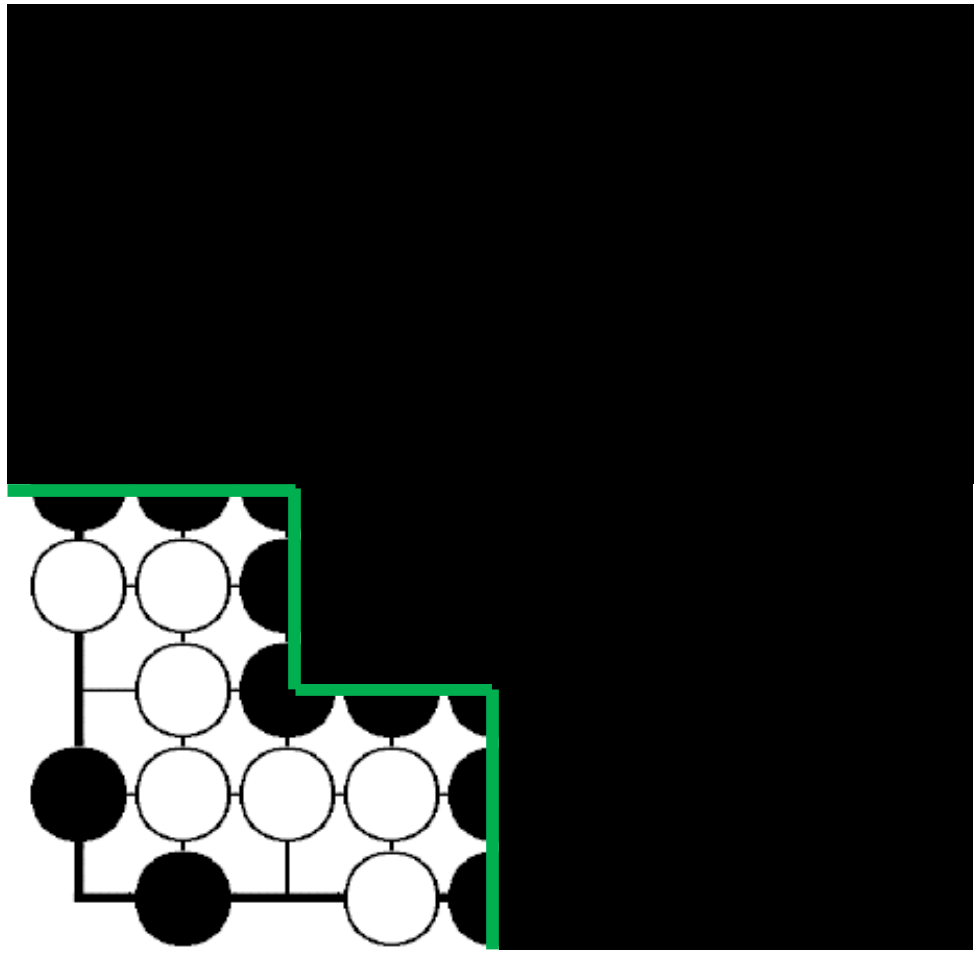

**White won the game.**

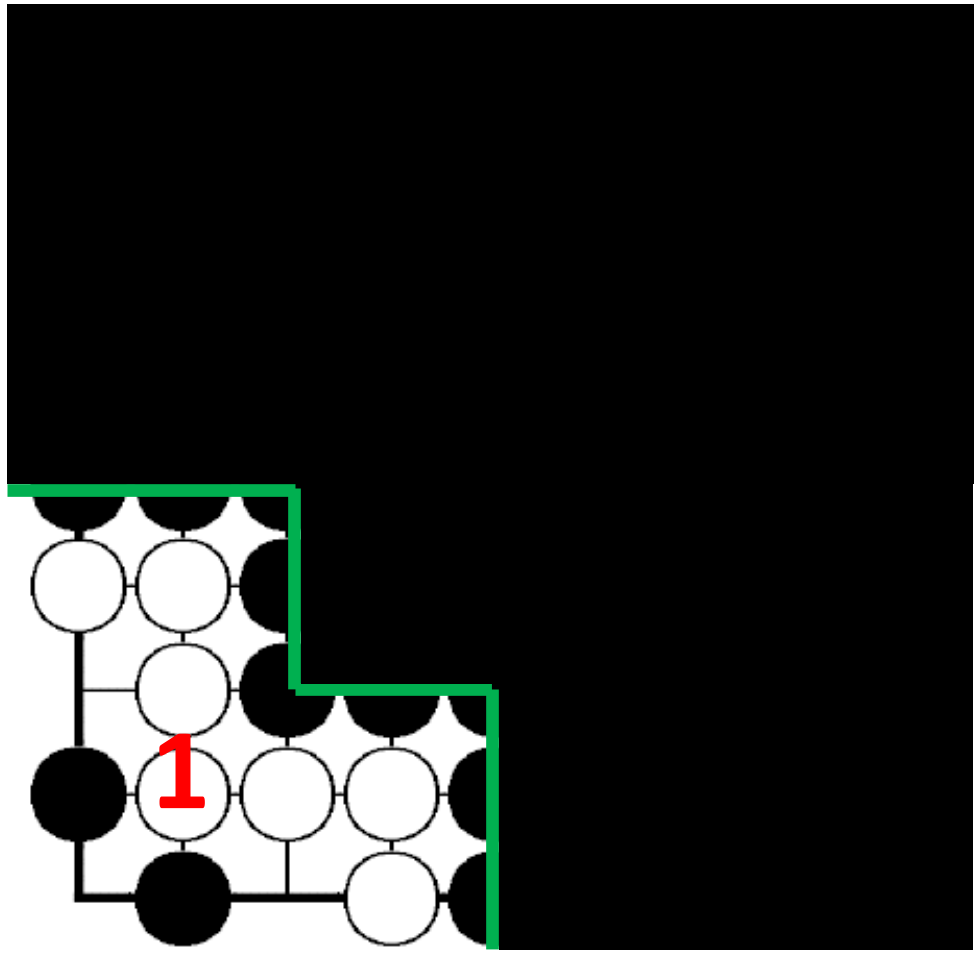
# 2. ATARI GO and CGT







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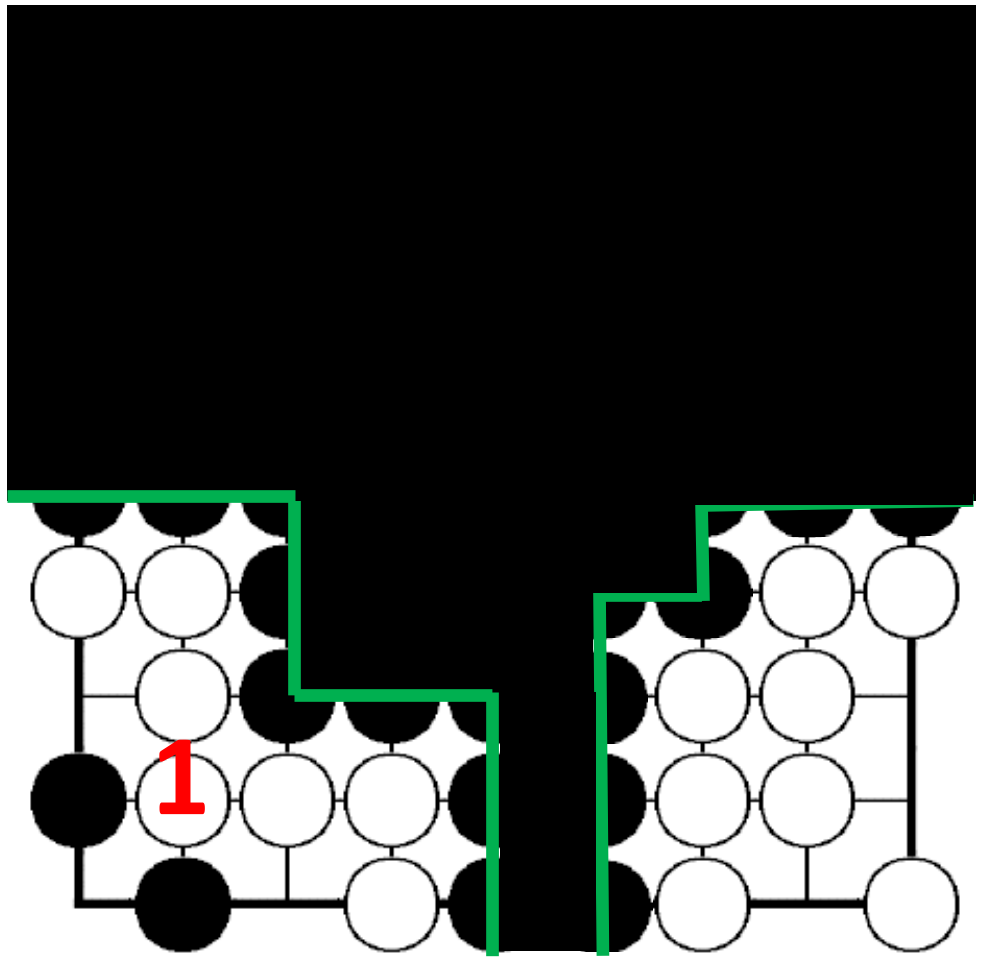
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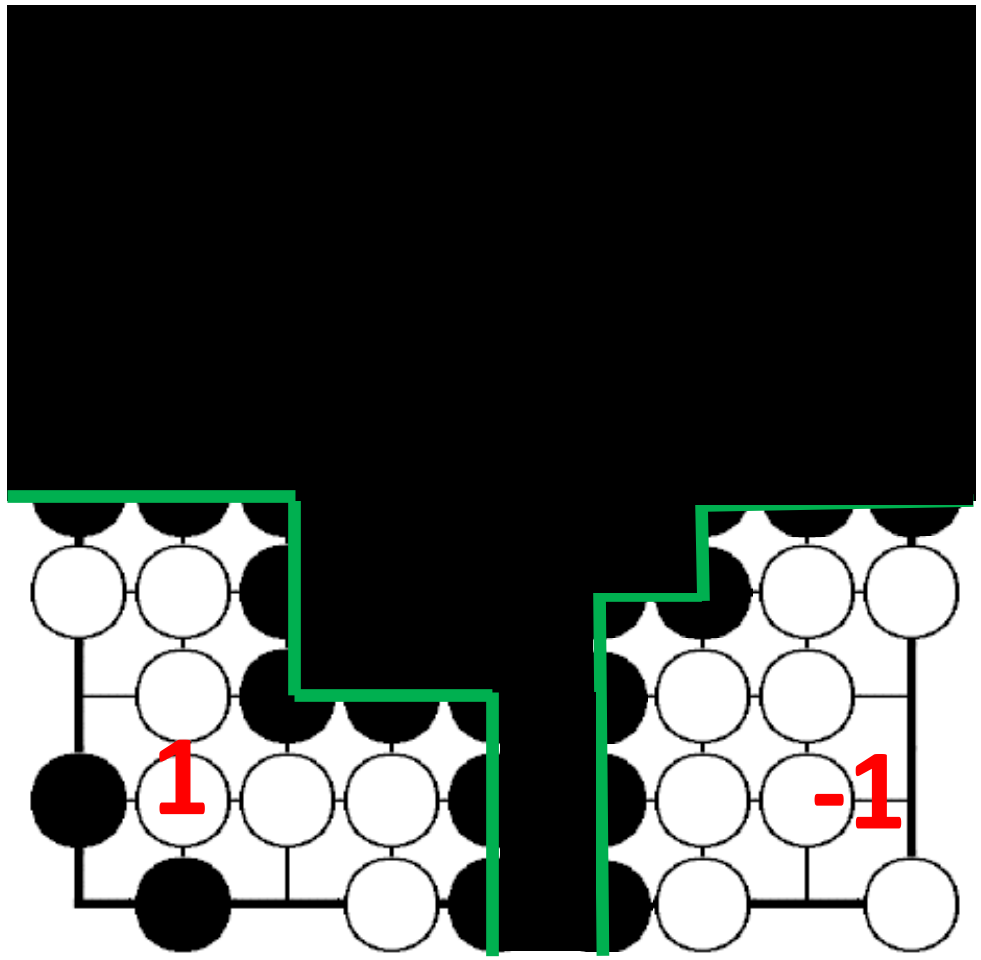
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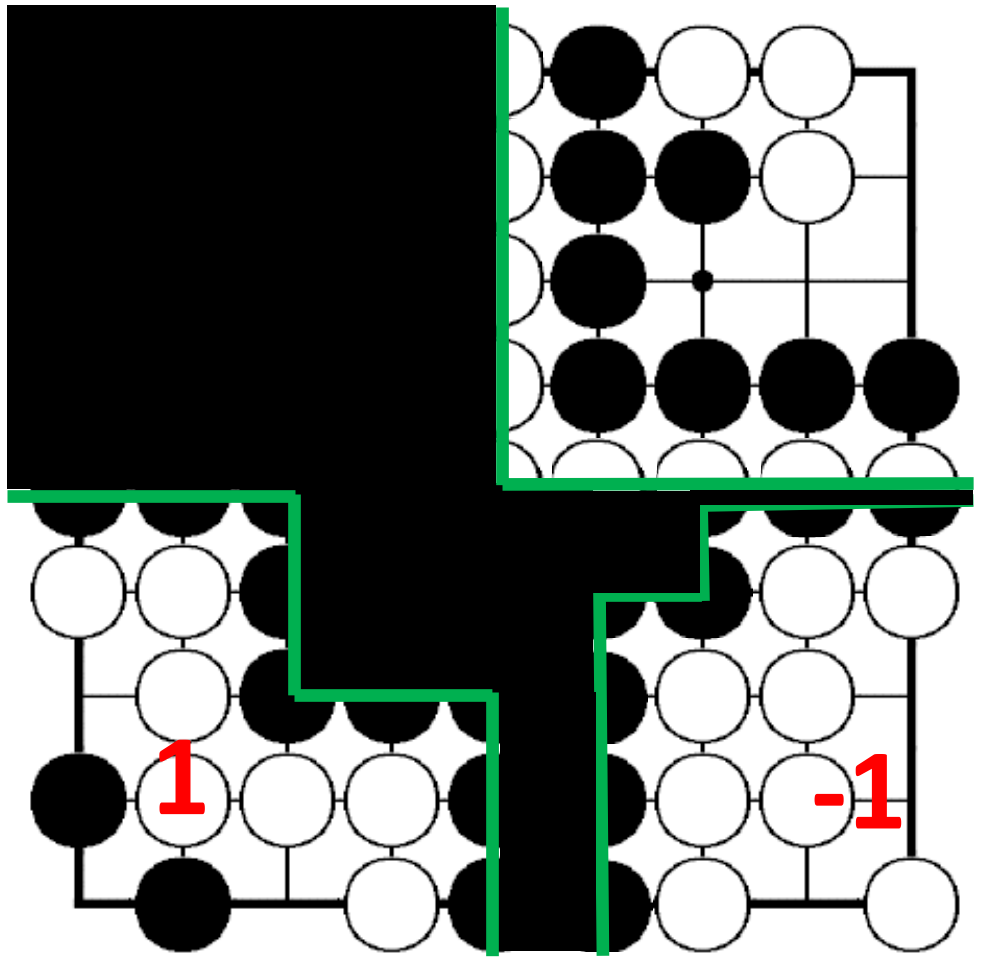
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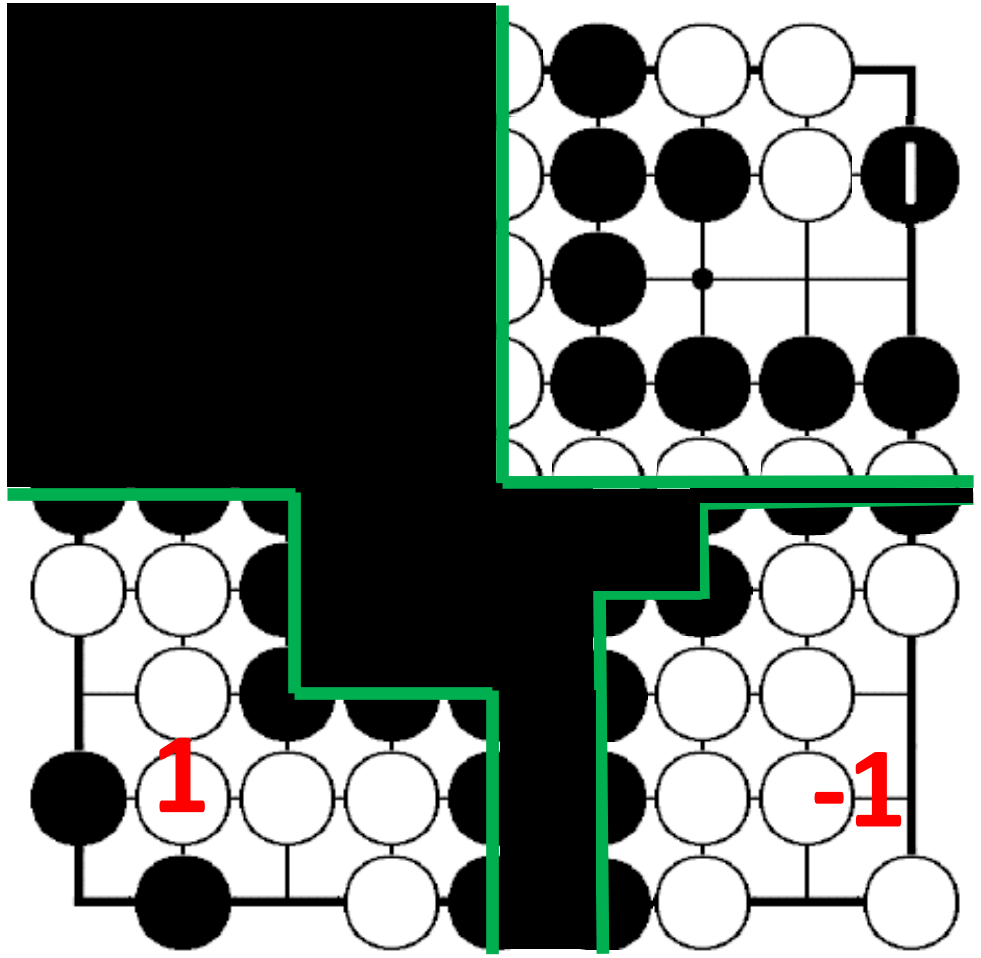
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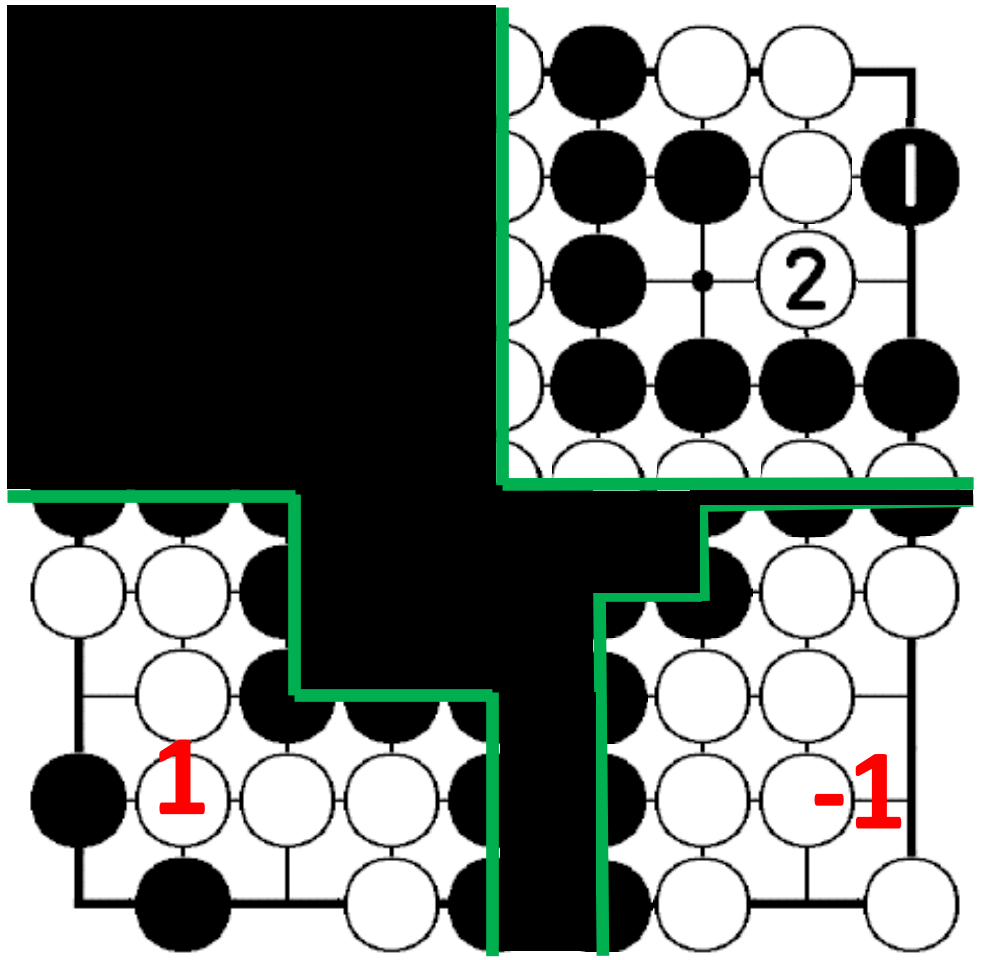
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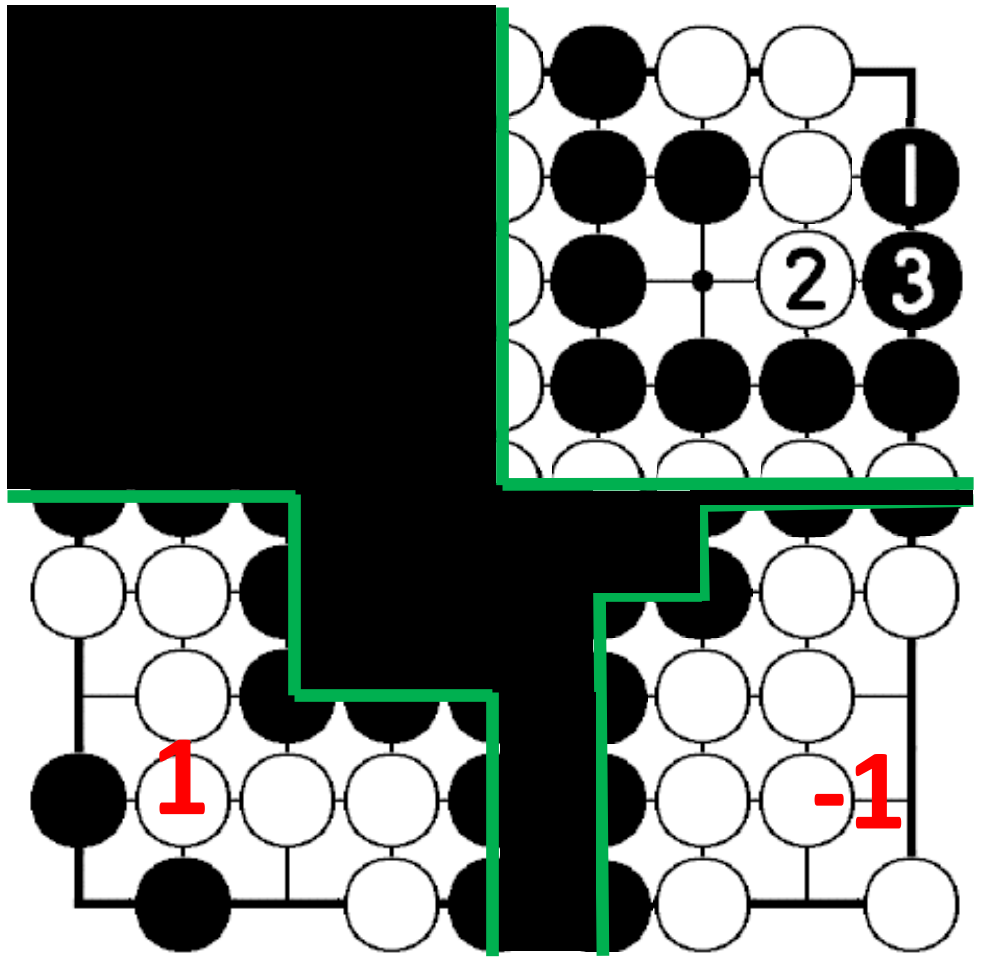
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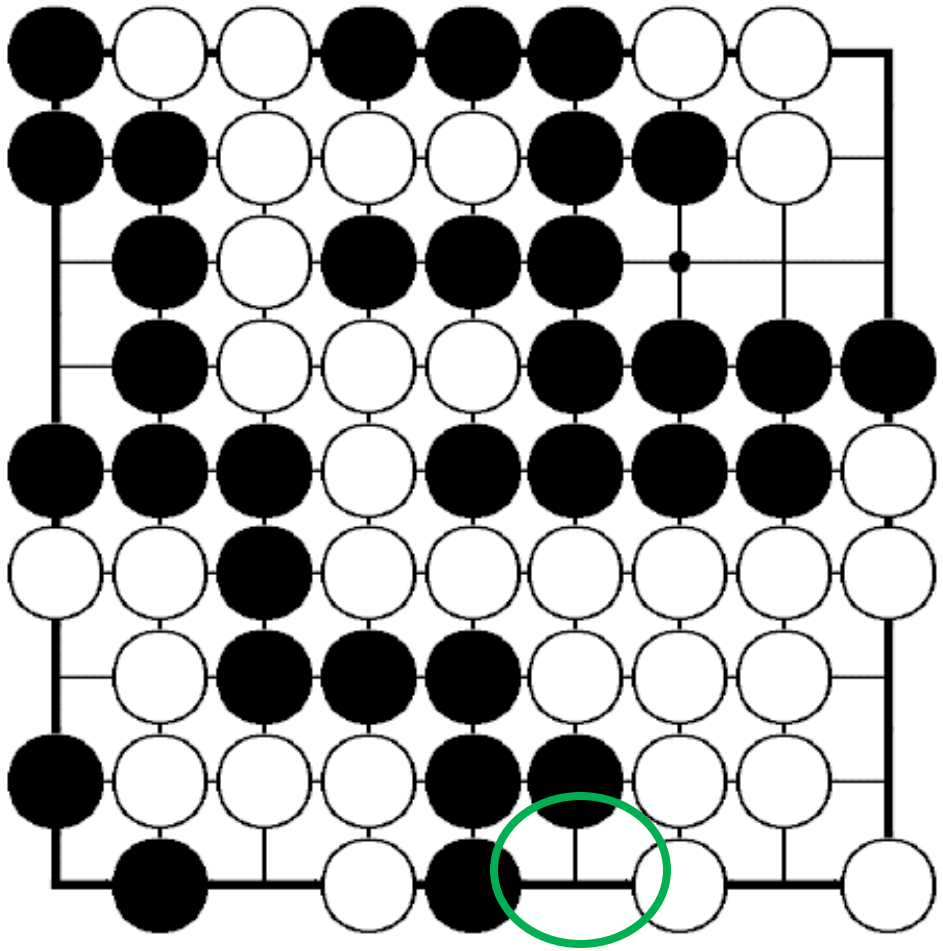

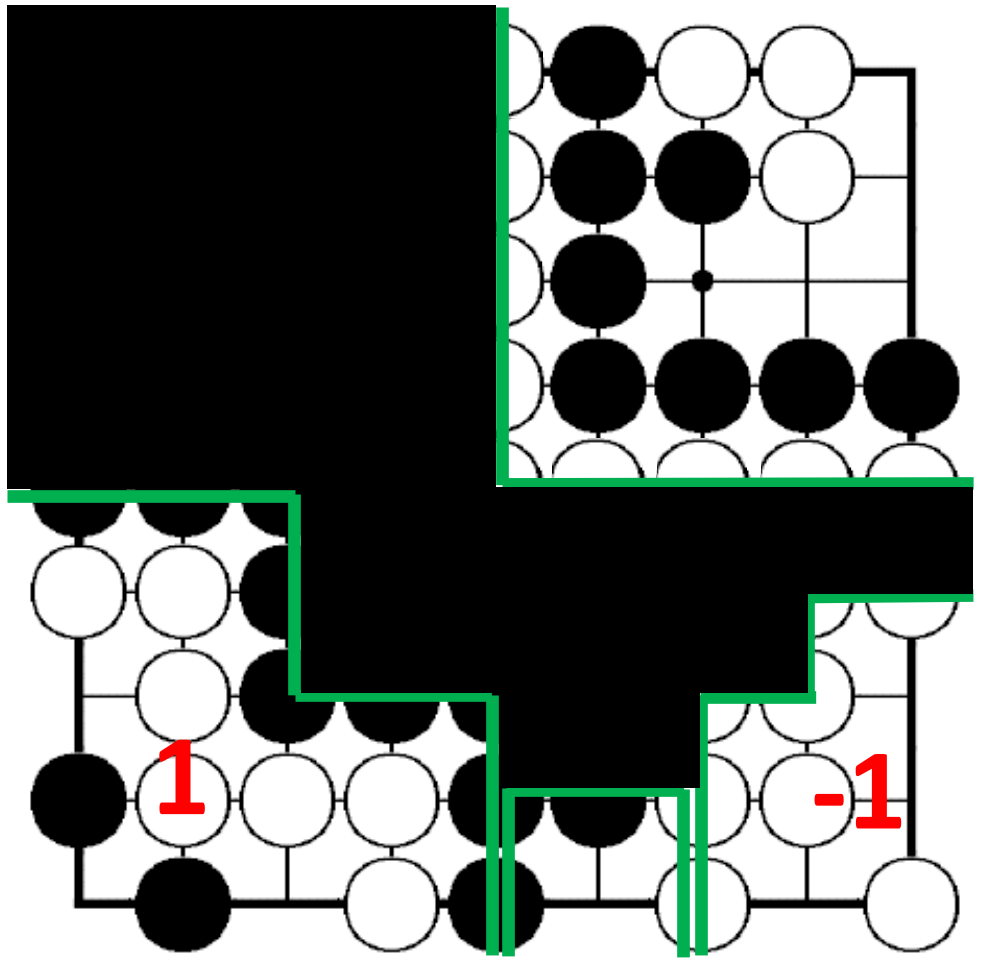
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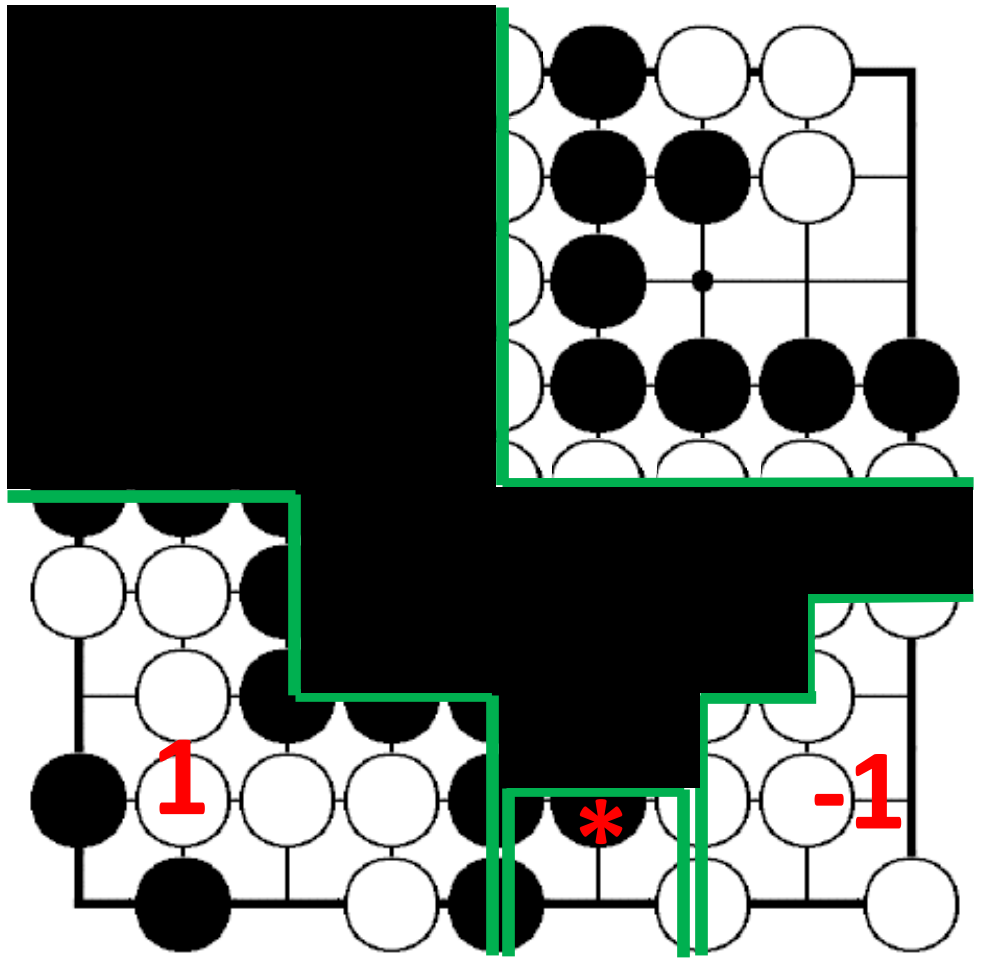
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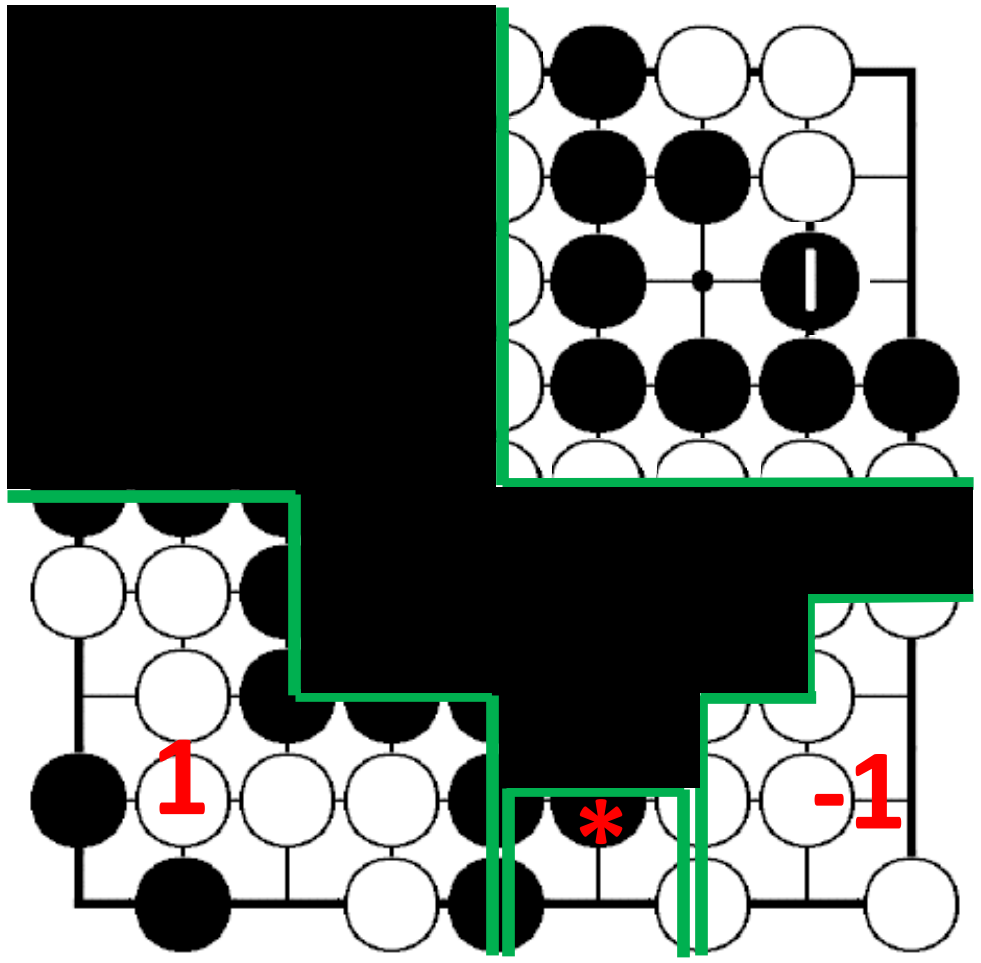
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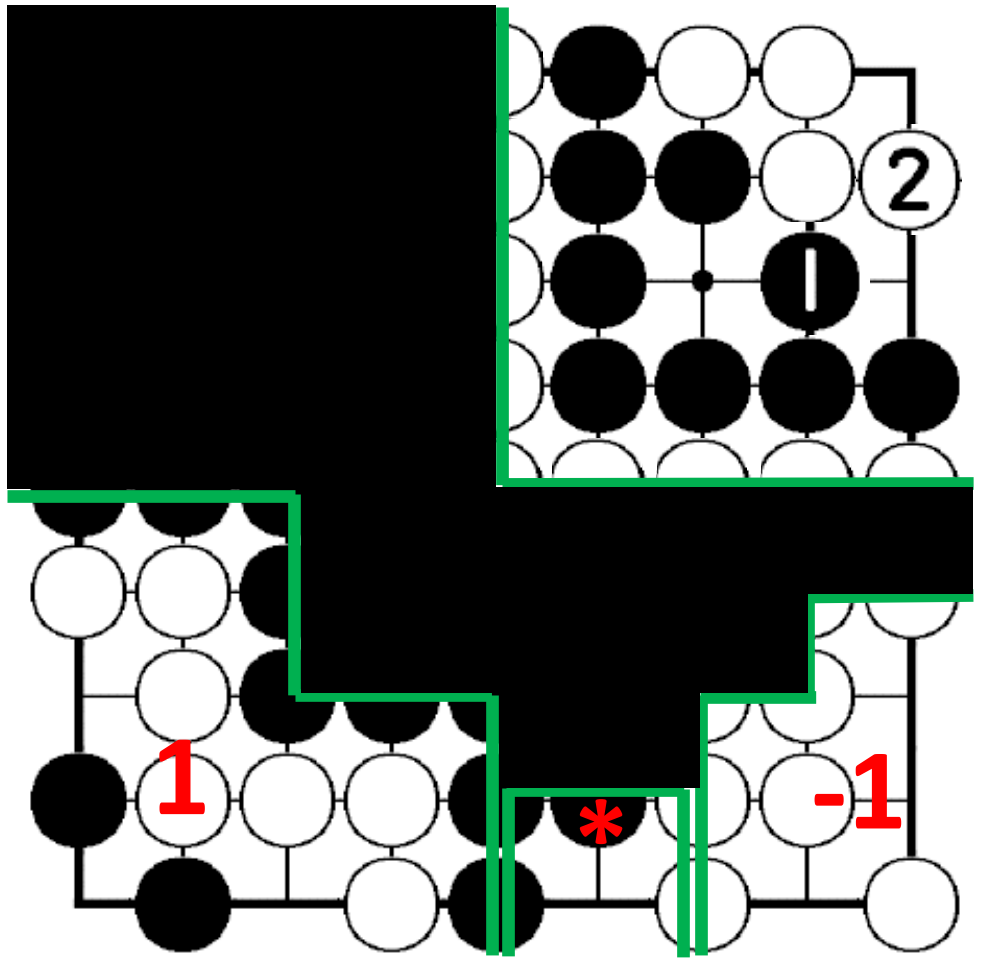
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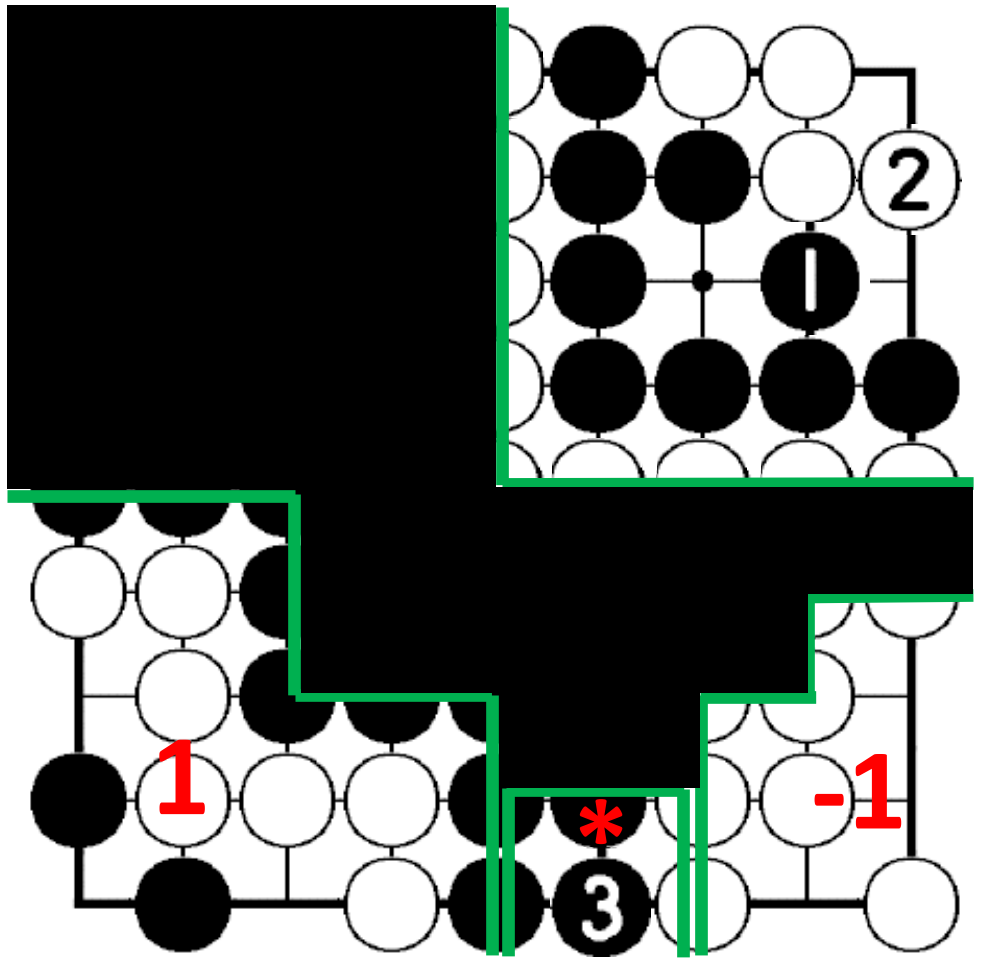
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# 3. Yasuda’s Project

Yasutoshi Yasuda Teaching Capture Go to Children

# Go as Communication:

## The Educational and Therapeutic Value of the Game of Go

Yasutoshi Yasuda 9 Dan

USA, Netherlands, Romania, Czech Republic, Poland, Hungary, Japan