

Kalah

This game requires a Kalah board and 36 seeds or counters. The board has six small pits, called houses, on each side; and a big pit, called a Kalah or store, at each end. An egg carton works well.

1. At the beginning of the game, three seeds are placed in each house.
2. Each player controls the six houses and their seeds on his side of the board. His score is the number of seeds in the store to his right.
3. Players take turns *sowing* their seeds. On a turn, the player removes all seeds from one of the houses under his control. Moving counter-clockwise, the player drops one seed in each house in turn, including the player's own store but not his opponent's.
4. If the last sown seed lands in the player's store, the player gets an additional move. There is no limit on the number of moves a player can make in his turn.
5. If the last sown seed lands in an empty house owned by the player, and the opposite house contains seeds, both the last seed and the opposite seeds are captured and placed into the player's store.
6. When one player no longer has any seeds in any of his houses, the game ends. The last person to move wins.

See <http://en.wikipedia.org/wiki/Kalah>

(Notice our last move wins rule.)

Among the earliest evidence of the game are fragments of a pottery board and several rock cuts found in [Aksumite Ethiopia](#) in [Matara](#) (now in [Eritrea](#)) and [Yeha](#) (in Ethiopia), which are dated by archaeologists to between the 6th and 7th century AD; the game may have been mentioned by [Giyorgis of Segla](#) in his 14th century [Ge'ez](#) text "Mysteries of Heaven and Earth," where he refers to a game called [gargis](#), a term used in [Ge'ez](#) to refer to both Gebet'a (Mancala) and *Sant'araz* (modern *sent'erazh*, Ethiopian [Chess](#)).^[1] The similarity of some aspects of the game to [agricultural](#) activity and the absence of a need for specialized equipment present the intriguing possibility that it could date to the beginnings of [civilization](#) itself; however, there is little verifiable evidence that the game is older than about 1300 years.

Try to find an equivalent NIM game. Start with non-overlapping and small slightly overlapping distributions.

