## 1154-M5-2510 L. Kerry Mitchell\* (lkmitch@gmail.com). Sequences and Patterns Arising from Mancala on an Infinite Board.

The present work considers the game of Mancala, played on an infinite board instead of the regular six-pit board. In particular, sequences of moves are investigated wherein the player's last stone lands in the home pit, allowing for another turn. The distribution of stones that can be cleared in one series of turns exhibits many interesting patterns, including locally linear and other polynomial arrangements. And the sequence of pits that are played displays periodic patterns of increasing length and complexity. It is speculated that, given enough pits, arbitrarily complex structures can be found. (Received September 17, 2019)