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Nitya Mani*, nityam@stanford.edu, and **Rajiv Nelakanti, Simon Rubinstein-Salzedo** and **Alex Tholen**. *\mathcal{P} -Play in Candy Nim*.

CANDY NIM is a variant of NIM in which both players aim to take the last candy in a game of NIM, with the added simultaneous secondary goal of taking as many candies as possible. We give bounds on the number of candies the first and second players obtain in 3-pile \mathcal{P} positions as well as strategies that are provably optimal for some families of such games. We also show how to construct a game with N candies such that the loser takes the largest possible number of candies and bound the number of candies the winner can take in an arbitrary \mathcal{P} position with N total candies. (Received September 13, 2018)