Q: I was thinking of devising one for later rounds of Mathathon based on the Sprague-Grundy theorem, involving multiple lists of numbers and ~~the~~ the ability to subtract, for example, either 1 or any even number $\leq N_i$, where N_i is the number on the top of the i^{th} pile, from an arbitrary pile of the player's choice each time. The constraints of the game can be modified and made more difficult, but ideally with a closed, piecewise solution.

Level: The theorem is not very well known, and this is potentially a mathathon problem because of the difficulty of understanding and applying the theorem, in any case; and the fact that it is barely known by most.