Title

Zechendorf group

Theorem *Number of Moves in a Zeckendorf Game*

Suppose a Zechendorf game starts with N numbers in the entry F_0. The number of moves M_N for the game to terminate is determined by the following identity.

$$M_N \equiv N - \nu(N) + S_1 \equiv N - \nu(N) + S_2 - \left\lfloor \frac{N+1}{3} \right\rfloor$$

The quantity $\nu N, S_i$ denotes the number of summands in the Zeckendorf decomposition of N and the number of splitting moves performed in grid i.

scrap this... there is an algebra mistake in the pf.