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RATWYT.

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Summary: WYTHOFF is played on a pair of nonnegative integers, (M, N) . A move either subtracts a positive integer from precisely one of M or N such that the result remains nonnegative, or subtracts the same positive integer from both M and N such that the results remain nonnegative. The first player unable to move loses. RATWYT uses rational numbers instead, transformed using a generalization of the rules of WYTHOFF. Using the Calkin-Wilf tree, we show how to play RATWYT, and any other rational take-away game.

Classification: A24

Keywords: Wythoff

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