Math Challenge Problem

for early March 2016

Magic Cookie Towers

You have a stack 9 Samoas® and a stack of 14 Thin Mints®. But these are *magic* cookies. Every time you eat one cookie from one stack, the other stack grows by two cookies. And if you eat two cookies from one stack, the other stack will grow by one cookie. So for example, from the starting stacks, you could end up with stacks of sizes $(8, 16)$, $(7, 15)$, $(10, 12)$ or $(11, 13)$ after one round of eating cookies.

The Challenge: Is it possible, through repeated eating of cookies, to end up with the same number of cookies in both stacks? Prove your answer.

Submit solutions to Ross 2239G or `oscar.levin@unco.edu` by **Monday, March 21**.

The best solution WIN A PRIZE!
Prizes include nifty Rubik's style puzzle cubes, math puzzle books, math games, even a math coloring book. So submit your answer TODAY!