

DISCUSSION FOR SIXTH TUTORIAL

DATE: MONDAY DEC 6 (LBT01), FRIDAY DEC 10 (LCT01), MONDAY JAN 10 (LBT02 & LBT03), FRIDAY
JAN 7 (LCT02)

From Thinking Mathematically, Second edition, p. 196. "Pólya Strikes Out."

Write down the positive integers $1, 2, 3, \dots$. Strike out every third integer starting with the third. Write down the cumulative sums of the numbers that remain. Strike out every other number in the cumulative sums starting with the second. Write down the cumulative sums of the numbers that remain. What is the sequence of these numbers?

Generalize this sequence by starting with a different sequence or changing the strikeout rule.