The Towers of Hanoi is a famous puzzle consisting of 3 spindles and 64 disks of successively smaller diameter (only 4 are shown).

To start, all the disks are on spindle A. Each turn, one disk can be moved from one spindle to another, provided it is not placed on top of a smaller disk. The goal is to move all 64 disks from A to C.

What is the fewest possible number of moves?

What should the very first move be?
1. At University O there are 23 tenured math professors. Tradition prescribed that at their weekly luncheon meeting, faithfully attended by all 23, any member who had discovered an error in their published work should make an announcement of this fact, then promptly resign. Such an announcement had never actually been made, because no professor was aware of any errors in their own work. But in fact, over the years, at least one error had been found in the work of every member of the department by at least one other professor. This error had been mentioned to all the other members of the department, except the actual author (to avoid any resignations).

   One fateful year, a new Professor X came visiting from another university, with hopes of being offered a permanent position at the end of the year. He was made aware during the year of all the published errors made by the other professors. When he was not offered a job at the end of the year, he obtained his revenge at the final luncheon by announcing, "I have enjoyed my visit here very much. But I think you should know: at least one of you has published an incorrect result, which has been discovered by others in the department."

What happened the next year?