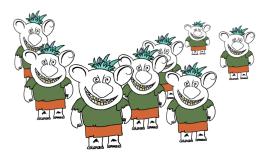# Math Challenge Problem

for late March, 2015

### Too Many Trolls

While walking through a fictional forest, you come upon a large group of trolls. The trolls all look identical, but you know that some of the trolls are knights who always tell the truth, while the rest of the trolls are knaves who always lie. Each troll makes a single statement.

The first troll says, "Hi, I'm Tucker."

The remaining 41 trolls each say, in order, "If the previous troll is a knight, then by the time I'm done speaking you will have heard more lies that truths."

**The Challenge:** Is the first troll's name really Tucker? And which of the remaining trolls are knights and which are knaves?

Submit solutions to Ross 2239G or oscar.levin@unco.edu by **Friday, April 3**.

The best solution will be announced at the following Math Club (Tuesdays at 4:30) and 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!