## MATH CHALLENGE PROBLEM

for October 2017

## Cents percents

$$100^{\frac{x-99}{\frac{x-98}{\frac{x-97}{\frac{x-96}{\frac{x-95}{\frac{\dots}{100}}}{100}}}{100}}$$

One hundred of the dimmest bank robbers recently broke in to the Denver Mint and made off with a truck-load of fresh new pennies. To divvy up their loot, they decide that the youngest thief will get 1% of the score, then the 2nd youngest will get 2% of what is left, the third youngest getting 3% of what is left after that, and so on, until the oldest (100th youngest) gets 100% of what is left after everyone has taken their share.

**The Challenge:** Which thief receives the largest share? Further, what is the least amount of money he could leave with, assuming no rounding occurs while splitting the take?

Submit solutions to Ross 2239G or oscar.levin@unco.edu by Tuesday, October 31.

The best solution will 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!