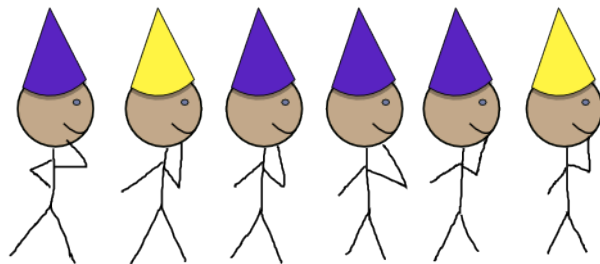


MATH CHALLENGE PROBLEM

for late September 2015

Hat Jail



You and 5 of your friends were caught distributing an exponent over addition and thrown in math jail. Luckily, the jail is overcrowded so the jailer has decided to give you a chance to win your freedom. In one hour, he will line you up so that the person in the back of the line can see everyone else and the person in the front of the line cannot see anyone. He will then turn out all the lights and place either a yellow or a purple hat on each of your heads. When he turns on the lights, you will each be able to see the colors of the hats on the friends standing in front of you, but no others (and certainly not your own). He will then ask each of you to guess the color of your own hat, starting from the back of the line. Each of you may only say a single word, either “purple” or “yellow.” If at least 5 out of the 6 of you guess correctly, he will let you all go free.

The Challenge: Find a strategy that you and your friends can use to guarantee your freedom.

Submit solutions to Ross 2239G or oscar.levin@unco.edu by **Wednesday, Sep 30**.

The best solution will be announced at the following Math Club (Wednesdays 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!