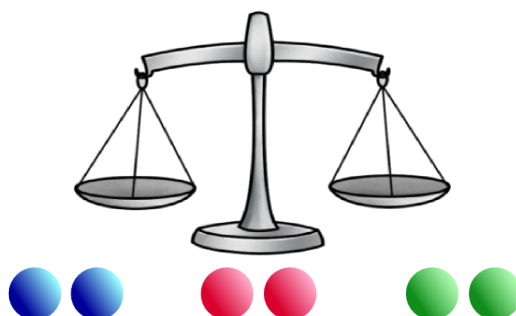


Math Challenge Problem

for March 2012

Weighing Pairs



You have three pairs of weights - a blue pair, a red pair and a green pair. In each pair, one of the weights is slightly heavier than the other. The heavy weights all weigh the same as each other, and the lighter weights all weigh the same as each other. In addition, you have an old fashioned balance scale.

The Challenge: What is the least number of times you must use the balance scale in order to find the heavier weight out of each pair?

Bonus Challenge: Answer the above challenge with n pairs of weights.

Submit solutions to Ross 2239G or to oscar.levin@unco.edu by *Friday, March 30th*.
The best solution will be posted on the Math Challenge Problem webpage.

Look for a new Challenge Problem in April