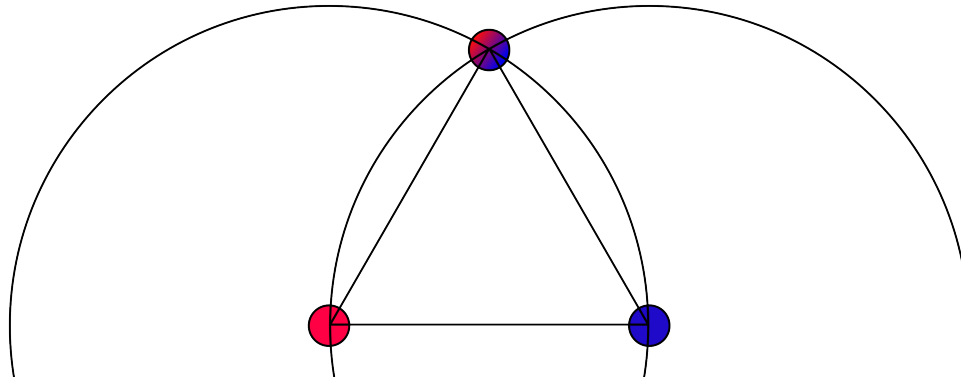


Math Challenge Problem

for early October, 2014

Coloring the Plane



Suppose you 2-color the plane - that is, color every point in the plane in one of two colors (red or blue). As you can see from the picture proof above, it is not too difficult to prove that there must be two points exactly 1 inch apart that are colored identically (either both red or both blue, in this case).

What if you 3-color the plane?

The Challenge: Prove that no matter how the points of a plane are 3-colored, there will exist two points, exactly 1 inch apart, colored identically.

Submit solutions to Ross 2239G or oscar.levin@unco.edu by **Friday, October 17**.

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!**