



Bilkent University
Department of Mathematics

PROBLEM OF THE MONTH

Term: October 2013

There are N points in the space no three of which are collinear. All pairs of points are connected by $\binom{N}{2}$ line segments and each segment is colored either blue or red such that the following two conditions are held:

- there is no triangle with exactly 1 blue side
- there are no 13 points any two connected by the same colored segment

What is the maximal possible value of N ?