



Bilkent University
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PROBLEM OF THE MONTH

Term: October 2012

There are n points in the space, some pairs of points are connected by line segments. Suppose that the total number of line segments is 3018 and each line segment is colored in one of the given three colors so that after removing of all line segments of *any color* each pair of points will be connected by some path consisting of line segments. Find the maximal possible value of n .