Friday, March 15, 2013

Consider $n$ points in the plane, such that the distance between them is distinct. Joint each point by a straight segment to its nearest neighbor. Can the obtained configuration contain triangles?

**Solution.** Consider any three points in that set, call them A,B,C. Assume that AB is the longest distance between these three points. Then A can not be connected to B.

Good Luck! Have fun and enjoy Mathematics!