Category: Medium

Competition: Not yet included in any competition

This question is actually a combination of maths and graph theory and both concepts need to be applied consecutively to obtain the solution of the problem. Details of concepts tested:

1. Good understanding of graph theory is needed to observe that the problem needs it. This observation is the first step. Understanding that edges are undirected and users are nodes (the number to be verified) is not always trivial
2. Maths pertaining to graph theory is needed to find number of edges and obtaining the quadratic equations needed
3. These equations need to be graphed (on graph paper) or their properties should be verified to get the relevant solution
4. The last concept tested is a very good understanding of inequalities. This is needed to join all the above concepts into a single solution.