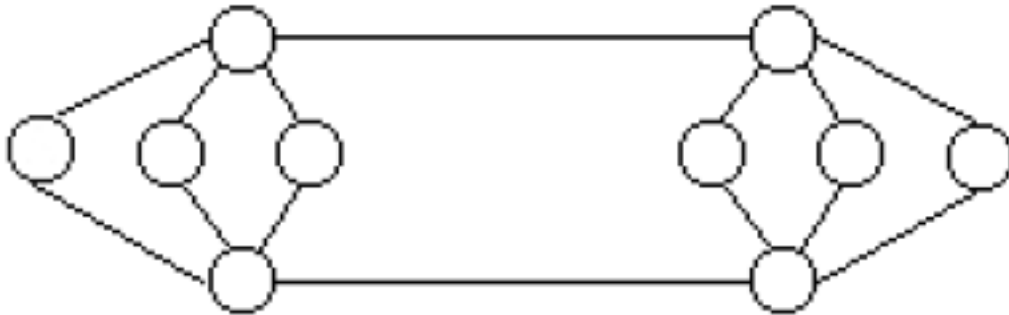


Weekly Problem Competition

Friday, September 11, 2009

Choose 10 different numbers from $\{0, 1, 2, \dots, 14\}$ and put them into the following circles. If there is an edge between two circles, then take the absolute value of their difference. Is it possible to have 14 different absolute values?



Remarks:

The rules and results of the competition can be found at <http://www.math.iit.edu/~weeklyproblem>
You have to submit the solution by email, to weeklyproblem@math.iit.edu
Please feel free to tell any IIT undergraduate student about the competition.

**Thank you for your participation
Good Luck !**