

PRINT Your Name: _____

Quiz for March 2, 2006

Show that in a group of five people (where any two people are either friends or enemies), there are not necessarily three mutual friends or three mutual enemies.

ANSWER: Arrange the five people on the vertices of a pentagon. Let each person be friends with the two adjacent people but enemies with the two distant people. Notice that each subset of three vertices contains two adjacent vertices and two nonadjacent vertices.



 friends
 enemies