

# Straight's Problem of the Week

GRE 569 – August 26, 2008

*Full problem solution must be submitted  
on Tuesday, September 2, 2008*

My wife Wendy and I decide to go out to a restaurant with four other couples, so there are a total of 10 people at dinner, five men and five ladies. When we arrive at the restaurant, there are some introductions, since not everyone knows all of the other people. In fact, every person shakes hands with all of the people whom he or she doesn't know, *and nobody else.*

At the end of the dinner, I ask everyone else, including Wendy, how many hands each of them shook. The answers I get are amazing: 0, 1, 2, 3, 4, 5, 6, 7, and 8.

How many hands did Wendy shake?