Problem of the Week
Week Nine—Dinner Date
Solutions due by high noon on Friday, November 6th, 2015

Ten married couples (5 men and 5 women) are to sit at a round table for dinner.

a. How many arrangements around the table are possible, if arrangements are considered the same when one can be obtained from the other by rotation (see example below)?

b. In how many of these arrangements will the sexes alternate?

c. In how many of these arrangements will a husband remain next to his wife?

This problem brought to you by Dr. Jessica Chapman

Submit your solutions to Dr. Maegan Bos, maegan@stlawu. You may submit either a hard copy or an electronic copy via Sakai. Good Luck!!