Name:

Problem 1: Lemma 3 of Section 6 states that if p is an odd prime, then the least residues

$$2, 3, 4, \ldots, p-4, p-3, p-2$$

can be partitioned into $\frac{p-3}{2}$ pairs (a, a') such that for each pair,

$$aa' \equiv 1 \pmod{p},$$

with $a \not\equiv a' \pmod{p}$.

Let $p = 11$. Partition the set

$$\{2, 3, 4, 5, 6, 7, 8, 9\}$$

into four pairs (a, a') such that in each case $aa' \equiv 1 \pmod{11}$.