

**MATH 113: DISCRETE STRUCTURES
HOMEWORK DUE WEDNESDAY WEEK 12**

Problem 1. Read §6.5 of *DM:EB*. Comment on the relative merits of the book's proof and the one we discovered in class.

Problem 2. Let p be prime and a be an integer $1 \leq a \leq p - 1$. Consider the product

$$a(2a)(3a) \cdots ((p-1)a)$$

and use your result from Problem 2 of HW12M to deduce Fermat's little theorem.