MATH 113: DISCRETE STRUCTURES HOMEWORK DUE WEDNESDAY WEEK 13

Problem 1. Prove that if integers *a* and *n* are relatively prime, then *a* has an inverse modulo *n*, *i.e.*, there exists an integer *x* such that $ax \equiv 1 \pmod{n}$.

Problem 2. Solve the congruence $2x^2 - x \equiv 0 \pmod{11}$.