8.2.1b The congruence $x^{p-2} + \cdots + x^2 + x + 1 \equiv 0 \pmod{p}$ has exactly $p-2$ incongruent solutions, and they are the integers $2, 3, \cdots, p-1$

8.2.2b Verify the congruence $x^2 \equiv -1 \pmod{65}$ has four incongruent solutions; hence, Lagrange's theorem need not hold if the modulus is a composite number.

8.2.3b Determine the roots of the prime $p = 19$ expressing p as a power of some one of the roots.

8.2.6a Assuming that r is primitive root of the odd prime p, establish: The congruence $r^{(p-1)/2} \equiv -1 \pmod{p}$ holds.