

quiz 09.1

(1) Verify (with reasonable efficiency) that 6 is a primitive root modulo 59.

(2) Find a solution to the system

$$\begin{cases} x = 4 \pmod{53} \\ x = 2 \pmod{79} \end{cases}$$

(3) Use Pollard's rho method to find a proper factor of 1313.

(4) Use Pollard's $p - 1$ method to find a proper factor p of 779, using list of primes 2, 3.