P1 — Small Primes

First 64 primes for Loom s_t

Index i : prime[i]

1	2	3	4	5	6	7	8

P2 — ⌈log₂ n⌉ Table

n from 1 to 4096

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Fill cells with ⌈log₂ n⌉; use as reference when encoding literals.

P3 — Golomb–Rice Examples

Signed mapping S(z) = 0,1,−1,2,−2,…; y=|S⁻¹(z)|

For p∈{0..4}, encode y by q=⌊y/2^p⌋ (unary) and r=y mod 2^p (p bits).

z	S(z)→y	p	q	r (bits)	code length (1+q+p)

P4 — Mod M Arithmetic

Hand steps for running chain updates

C_t = (17*C_{t-1} + 23*s_t + seq) mod 1,000,000,007

t	C_{t-1}	s_t	seq	17*C_{t-1}	23*s_t	sum	C_t (mod M)