

1. Let $n = 2465$
 - (a) Apply Pollard's ρ to find the smallest factor of n .
Perform this calculation by hand.
 - (b) Use today's Mathematica notebook to complete the factorization of n by using Pollard's ρ .
2. Use today's Mathematica notebook to find at least three prime factors p_1, p_2, p_3 of $n = 2^{1341} - 19$

For each prime factor p_i , verify that you obtained a collision in the mod p_i sequences $\{x'_i\}, \{y'_i\}$