

Use Pollard's ρ to solve the following DLPs

1. $2^x \equiv 157\,602 \pmod{1\,904\,027}$

2. $625^x \equiv 15\,662 \pmod{20\,789}$

3. $625^x \equiv 16\,592 \pmod{20\,789}$

4. $32^x \equiv 8102339777 \pmod{16472986427}$

5. $10^x \equiv 55280118052309167960656295593012$
 $\pmod{129003898576076751531908549775811}$