

Use today's Mathematica notebook and Shor's algorithm to solve these DLPs

1. $5087^d \equiv 140 \pmod{8039}$

2. $5087^d \equiv 4452 \pmod{8039}$

3. $9^d \equiv 8371 \pmod{22343}$

4. $9^d \equiv 3750 \pmod{22343}$

5. $9^d \equiv 1185461 \pmod{1300367}$