# **Number Theory 2 - Practice Problems**

# **Modular Exponentiation**

- <a href="https://codeforces.com/problemset/problem/913/A">https://codeforces.com/problemset/problem/913/A</a>
- <a href="https://www.codechef.com/problems/CHMOD">https://www.codechef.com/problems/CHMOD</a>
- <a href="https://www.codechef.com/problems/RSIGNS">https://www.codechef.com/problems/RSIGNS</a>

### Fermat's little theorem

- https://www.codechef.com/problems/EVILAND
- <a href="https://www.codechef.com/problems/NMNMX">https://www.codechef.com/problems/NMNMX</a>

## Wilson's theorem

https://www.spoj.com/problems/BORING/

### **Chinese Remainder Theorem**

- <a href="https://codeforces.com/problemset/problem/687/B">https://codeforces.com/problemset/problem/687/B</a>
- https://codeforces.com/problemset/problem/1266/A

# **Euler's Totient Function**

- <a href="https://www.codechef.com/problems/COZIE">https://www.codechef.com/problems/COZIE</a>
- https://www.spoj.com/problems/DCEPCA03/
- https://www.spoj.com/problems/ETF/
- https://www.spoj.com/problems/LCMSUM/

## **Matrix Exponentiation**

- https://codeforces.com/gym/102644/problem/A
- https://codeforces.com/gym/102644/problem/B
- https://codeforces.com/gym/102644/problem/D