

Homework 2

Homework Maths 2

1. Modular arithmetic - you just need to find examples, you don't need to prove anything.

1. Is it true that all odd squares are $\equiv 1 \pmod{8}$? = Yes

2. what about even squares $\pmod{8}$? = 4 or 0 (alternating)

2. Try out the vanity bitcoin address example at [asecurity](#) or the Ethereum [version](#)

3. What do you understand by Communication complexity - algebraic term of input code complexity

1. $O(n)$ Starks

2. $O(1)$ Snarks

3. $O(\log n)$ Bulletproofs

For a proof size, which of these would you want ? $O(1)$ for the smallest proof size