## Math 314 - Fall 2024

## Practice problems 3 (Exponents)

It used to be expensive to make things public and cheap to make them private. Now it's expensive to make things private and cheap to make them public.

— Clay Shirky

Quiz: October 22 2023

## Practice:

- (1) Compute  $3^9 \pmod{11}$  without using a calculator.
- (2) Find 5<sup>34</sup> (mod 17) without using a calculator.
- (3) Find the decryption function D(y) corresponding to the encryption function

$$E(x) \equiv x^9 \pmod{29}$$
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