



## Problem of the Week

### Problem C

#### What is the Remainder?

$3^6$  means  $3 \times 3 \times 3 \times 3 \times 3 \times 3$  and is equal to 729 when expressed as an integer. When  $3^6$  is divided by 5, the remainder is 4.

When the integer  $3^{2025}$  is divided by 5, what is the remainder?

$$\begin{array}{r} \text{Quotient} \\ \hline 5 \overline{) 3^{2025}} \end{array}$$

Remainder?