$\mathbb{Z}_{10} = \{0, 1, 2, \ldots, 9\}$

$+$ mod 10 $\quad\quad$ $\times$ mod 10

$1 + 8 = 8 + 1$

$\underbrace{\_\_\_\ \ldots\ \_}_{32} = 2^{32}$

$\underbrace{\_\_\_}_{2 \times 2 \times 2}$

n-bits can take 2^n values.

Let $p = 7$ $\quad$ $\underbrace{1\ 1\ 1}$

$q = 29$ $\quad$ $\underbrace{1\ 1\ 1\ 0\ 1}$

Let $p = 7$, $q = 11$

$N = 77$

$\mathbb{Z}_N = \{0, 1, 2, \ldots, 76\}$

$\mathbb{Z}_N^* = \mathbb{Z}_N \setminus \{0, 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 11, 22, 33, 44, 55, 66\}$

$\gcd(7, 77) = 7$

$\gcd(14, 77) = 7$

$\gcd(21, 77) = 7$

$\gcd(28, 77) = 7$