Let 
$$k_{pub} = (n, e) = (25\ 021, 3)$$

1. Pick an integer an integer  $x \in \mathbb{Z}_n$  to represent the plaintext and encrypt it by

$$y = e_{k_{pub}}(x) \equiv x^e \mod n$$

- 2. Write your ciphertext on the board
- 3. Try to decrypt the ciphertexts from other students

## Fill out the following tables

Do you notice a general pattern?

2. 
$$\frac{\mathsf{n}}{\phi(\mathsf{n})} \mid \frac{\mathsf{6}}{\mathsf{10}} \mid \frac{\mathsf{15}}{\mathsf{15}} \mid \frac{\mathsf{21}}{\mathsf{35}} \mid \frac{\mathsf{35}}{\mathsf{15}}$$

Do you notice a general pattern?