

1.  $P=3, Q=5$
2.  $n= 15, z= 8$
3.  $\gcd(e,8)=1, e=7$
4.  $d*7 \bmod 8 =1, d= 7$
5. public key= $\{7,15\} \{e,n\}$
6. private key=  $\{7,15\} \{d,n\}$

Encryption side: give/

Cipher text=  $p^e \bmod n$

$$=7^7 \bmod 15$$

$$= 823543 \bmod 15$$

$$= 13$$

$$=m$$

Decryption side:

Plain text=  $C^d \bmod n= 13^7 \bmod 15$

$$=7 = g$$