

1.  $x = 217$
2.  $p = 19$
3.  $q = 23$
4.  $n = 437$
5.  $\phi(n) = 396$
6.  $e = 19$
7.  $d = 271$
8. public key = (19, 437)
9. private key = (271)

$X = \text{testing} = 50$

Encrypt =  $50^{19} \bmod 437 = 354$

Decrypt =  $354^{271} \bmod 437 = 50 = \text{testing}$