

# Alice

mensaje  $x = 4$

# Bob

1. Elegir  $p = 3$  y  $q = 11$
2.  $n = p \cdot q = 33$
3.  $\Phi(n) = (3 - 1)(11 - 1) = 20$
4. Elegir  $e = 3$
5.  $d \equiv e^{-1} \equiv 7 \pmod{20}$ ;  
Donde  $d \cdot e = 7 \cdot 3 \equiv 1 \pmod{20}$

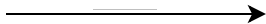
$$k_{pub} = (33, 3)$$



$$y = x^e \equiv 64 \pmod{33}$$

$$y = 31$$

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$$y^d = 31^7 \equiv 4 = x \pmod{33}$$