

Alice

Eve

Bob



1

In private, Bob creates a public encryption function E and a secret decryption function D .

2

E

Bob sends his public encryption function E to Alice.

3

In private, Alice writes her message in ASCII, M . She uses Bob's function E to calculate $N = E(M)$.

4

Alice sends N to Bob.

N

5

In private, Bob uses his decryption function D to calculate $M = D(N)$. He now has Alice's message.

Eve sees E and N , but cannot calculate M from these.