

Mathematics of Coding and Cryptography

Worksheet 10

Suppose, for the sake of easy decryption, Bob chooses a small decryption exponent and his public key is:

$$n = 3092732287 \quad e = 545756273$$

You (Eve) then intercepts a message sent from Alice to Bob given by

$$c = 137165523$$

If you know that $d < \frac{1}{3n^{1/4}}$, decrypt the message that Alice sent to Bob (using the method we discussed in class).