

**Homework 2**  
**Fall 2021**  
**Due on Monday October 18, 2021, 11:59 p.m. via Blackboard**

If you do not have the textbook, use the following link to download it

<https://emadalsuwat.github.io/cryptography/textbook1.pdf>

Do textbook problems:

- Problem 4.6 (Page 142)
- Problem 4.7 (Page 142)
- Problem 4.13 (Page 143)
- Problem 4.15 (Page 143)
- Problem 4.19 (Page 144)
- Determine the multiplicative inverse of  $x^3 + 1$  in  $GF(2^4)$
- Determine the multiplicative inverse of  $x^3 + x + 1$  in  $GF(2^4)$