

Homework 9
CMSC 641
Analysis of Algorithms

1 Course References

[CLR] Cormen, Thomas H., Charles E. Leiserson, and Ronald L. Rivest,
“**Introduction to Algorithms**,”
MIT Press, latest edition.

[GCL] Geddes, Keith o., Stephen R. Czapor, and George Labahn,
“**Algorithms for Computer Algebra**”
Kluwer Academic Publishers (1992).

2 Reading Assignment

Read Chapters 32, and 33 of [CLR]
Read pages 176 - 183 of [GCL]

3 Homework 9

The following homework is taken from [CLR]

- Exercise 33.1-1, p 807
- Exercise 33.1-2, p 807
- Exercise 33.2-2, p 813
- Exercise 33.3-1, p 819
- Exercise 33.4-1, p 823
- Exercise 33.5-1, p 826
- Use Garner’s algorithm using the positive representation to solve

$$\begin{cases} a = 2 \pmod{4} \\ a = 1 \pmod{5} \\ a = 3 \pmod{7} \end{cases}$$

- Use Garner’s algorithm using the symmetric representation to solve the system of modular equations given in the previous problem