

Instructions

- Answer each question completely; justify your answers.
- This assignment is due at 17:00 on Wednesday March 16th in Assignment Box #44.

1. Exercise 4.3.22.

2. Exercise 4.3.35.

3. Reduce a modulo n :

(a) $a = 45678, n = 23$

(b) $a = (4567)(98765), n = 43$

(c) $a = (1234)^{45}(876)^7 + (567)^9, n = 13$

(d) $a = (-5582)^{333}(-8126)^{128}, n = 7$

4. Exercise 4.4.9, parts (b), (d), (g), (i) and (m).

5. Exercise 4.4.11, parts (c) and (d).

6. Exercise 4.4.14, parts (b), (c) and (d).

7. Exercise 4.4.21, parts (b) and (d).