

Instructions

- Answer each question completely; justify your answers.
- This assignment is due at 17:00 on Thursday November 17th in Assignment Box #23.

1. Exercise 4.3.22.

2. Reduce a modulo n :

(a) $a = 45678, n = 33$

(b) $a = (4567)(98765), n = 44$

(c) $a = (1234)^{45}(876)^7 + (567)^9, n = 11$

(d) $a = (-5582)^{99}(-8126)^{22}, n = 3$

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

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

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

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