

CSCI 389

Fall 2023

Assignment 7

Answer Keys

8.1:

X _n value	a ^k value
1	3
2	9
3	27
4	19
5	26
6	16
7	17
8	20
9	29
10	25
11	13
12	8
13	24
14	10
15	30
16	28
17	22
18	4
19	12
20	5
21	15
22	14
23	11
24	2
25	6
26	18
27	23
28	7
29	21
30	1

8.2:

- a) The maximum period obtainable from the generator is $2^{4-2}=2^2=4$.
- b) $a=3$, or 5, or 11, or 13.
- c) The value of the seed must be odd integers.