Quiz

59, 10, 31, 88, 22, 4, 68, 28, 15, 34, 17.

A -

$h(k) = i \mod 11$

0	88
1	22
2	68
3	34
4	59
5	4
6	28
7	15
8	17
9	31
10	10

B)

$h(K) = i^2 \mod 11$

0	88
1	10
2	22
3	28
4	31
5	59
6	4
7	68
8	15
9	34
10	17

c)

$$h(k) = (k \bmod 11 + i(7 + (k \bmod 8))) \bmod 11$$

0	88
1	15
2	68
3	4
4	59
5	34
6	28
7	22
8	
9	31
10	10

$4 + i(4) \overset{11}{\underset{(i=0)}{\equiv}} 4 \quad : 59$

$10 + i(3) \overset{11}{\underset{(i=0)}{\equiv}} 10 \quad : 10$

$9 + i(7) \overset{11}{\underset{(i=0)}{\equiv}} 9 \quad : 31$

$0 + i(1) \overset{11}{\underset{(i=0)}{\equiv}} 0 \quad : 88$

$0 + i(7) \overset{11}{\underset{(i=1)}{\equiv}} 7 \quad : 22$

$4 + i(5) \overset{11}{\underset{(i=2)}{\equiv}} 3 \quad : 4$

$2 + i(5) \overset{11}{\underset{(i=0)}{\equiv}} 2 \quad : 68$

$6 + i(5) \overset{11}{\underset{(i=0)}{\equiv}} 6 \quad : 28$

$4 + i(8) \overset{11}{\underset{(i=1)}{\equiv}} 1 \quad : 15$

$7 + i(3) \overset{11}{\underset{(i=5)}{\equiv}} 5 \quad : 34$

$6 + i(2) \overset{11}{\underset{(i=0)}{\equiv}} 8$

D; Random Probing

0	88
1	34
2	68
3	22 + 3
4	59
5	4+1
6	28
7	15 + 3
8	17+2
9	31
10	10

- 22 mod 11 = 0
  random number: 3 → 0+3=3
- 4 mod 11 = 4
  random number: 1 → 1+4=5
- 15 mod 11 = 4
  random number: 3 → 4+3=7
- 17 mod 11 = 6
  random number: 2 → 6+2=8