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| **GE 2318 Homework #7 2024**  **Name: Student ID:**  **Q1:** Given a map , fill the following table:   |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | Conclusions: | Period = 1 | Period = 2 |   **Q2:** List 3 new properties of discrete chaos that you learned from Lecture-7:  (1) infinitely many periodic solutions  (2) mixing  (3) diffusion (and confusion)  **Q3:** A sender uses a chaotic signal to encrypt the plaintext and then sends it to the receiver through the public channel, as shown below.  **Explain** how the receiver recoveries the plaintext from the encrypted signal received from the public channel.  C:\Users\Ron\Desktop\Capture.JPG  **Answer:**  (1) The chaotic signal generator generates a chaotic signal, and then mix it with the plaintext.  (2) The mixed signal is sent to the receiver through a public channel.  (3) The receiver generate the same chaotic signal, and then uses the received mixed signal to subtract the chaotic signal, thereby recovering the plaintext. |