Symmetries and Patterns

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1. Remembering: Recall the principles of symmetries and patterns in mathematics, including magic squares, handshake problems, graph coloring problems, pigeonhole principle, Bruijin sequences, and universal cycles.

2. Understanding: Understand the concepts behind magic squares, handshake problems, graph coloring problems, pigeonhole principle, Bruijin sequences, and universal cycles and their applications in mathematics.

3. Applying: Apply the principles of symmetries and patterns to solve various mathematical problems related to magic squares, handshake problems, graph coloring problems, pigeonhole principle, Bruijin sequences, and universal cycles.

4. Analyzing: Analyze and interpret complex problems related to symmetries and patterns, such as graph coloring problems, pigeonhole principle, Bruijin sequences, and universal cycles, using mathematical reasoning.

5. Evaluating: Evaluate the effectiveness of different strategies in solving problems related to symmetries and patterns, such as magic squares, handshake problems, graph coloring problems, pigeonhole principle, Bruijin sequences, and universal cycles.

6. Creating: Develop new strategies and techniques for solving advanced problems in symmetries and patterns, such as using the principles of probability in the Book of Changes and exploring the concept of probability in mathematical contexts.