**实验报告：MATLAB在复变函数中应用**

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| 1. **实验目的：**   1. Familiar with and use matlab to realize some calculations in complex variable functions;  2. Learn and master some basic operations in matlab;  3. Use matlab to verify some theorems and deepen the understanding of complex variable functions; |
| 1. **实验内容：**   Use Matlab to solve complex variable function problems： |
| 1. **实验代码与结果：**   **My code and output for this experiment are as follows:**  **Code：**    **Output：**    **Code：**    **Output：**    **Code：**    **Output：**    **Code：**    **Output：**    **Code：**    **Output：**    **Code：**    **Output：**        **Code：**    **Output：**    **Code：**    **Output：**    **Code：**    **Output：** |
| 1. **实验总结：**   Summary：  Through this simulation experiment of calculating complex variable functions, I have a deeper and more comprehensive understanding of basic calculation, derivation integral, limit and residue of complex variable functions. At the same time, I am also more proficient in function call and grammar of matlab.  Reflection：  The significance of learning complex functions is to deeply understand the complex field in mathematics, and master the skills of operation and analysis on the complex plane. The study of complex variable function has many applications in pure mathematics, but also has a wide range of practical applications in engineering, such as circuit analysis, signal processing, control system and so on. |