MTH 201 2024-2025 (1)

Tutorial 5

10/09/2024

1. Solve all the exercises of pages 105-107, 111 and 115-116 of the book by Hoffman and Kunze.

2. Let A and B be $n \times n$ matrices over F such that $A^2 = A$ and $B^2 = B$. Assume that the matrix $I - (A + B)$ is invertible, where I is a $n \times n$ identity matrix. Prove that rank A = rank B.