

Homework 7

1. Let A and B be two $n \times n$ matrices. Prove that $\text{tr } AB = \text{tr } BA$.
2. Let $A = CBC^{-1}$.
 - (a) True or False? $\dim \text{Nul}(A) = \dim \text{Nul}(B)$.
 - (b) True or False? $\text{Nul}(A) = \text{Nul}(B)$.