

EX.4.1.6, Sauer3

Let A be an n -by- n nonsingular matrix. (a) Prove that $(A^T)^{-1} = (A^{-1})^T$. (b) Let b be a vector of length n , then $Ax = b$ has exactly one solution. We call x this solution. Prove that x is also the unique solution of the normal equations associated with A and b .