

n41

$$f(A) = A^{-1} \cdot X (X^T A^{-1} X)^{-1}$$

$$A \cdot f(A) = X (X^T A^{-1} X)^{-1}$$

$$X^{-1} A f(A) = (X^T A^{-1} X)^{-1}$$

$$X^T A^{-1} X \cancel{X^{-1} A} f(A) = 1 \Rightarrow \underline{X^T \cdot f(A) = 1} \Rightarrow \underline{f(X \Omega X^T + \Delta) = f(\Delta) = (X^T)^{-1}} \quad \blacksquare$$