

November 28, 2006

Additional useful facts for HLA

Section 2.4

Additional Facts:

1. $A \in F^{n \times n}$ has rank k if and only if A has a nonsingular $k \times k$ submatrix, and every $(k + 1) \times (k + 1)$ submatrix of A is singular.
2. [GR, 8.9.2] If $A \in F^{n \times n}$ is symmetric and has rank k then A has a nonsingular $k \times k$ principal submatrix.