Topics for Test 2 on Intro to Probability


2. Probability Distributions, Cumulative Probability Distributions, Probability Density Functions (PDFs).


5. Covariance Matrices.

6. Univariate and Multivariate Gaussian Distributions and PDFs.

7. Diagonalization of Covariance Matrices and PCA.

8. Covariance of Principal Component Transform, $y$, of a random vector $x$.

9. Geometric Interpretation of $y$ in item 7 and the eigenvalues and eigenvectors of the covariance matrix of $x$.


11. Linear Combinations of Random Variables.