Homework No. 6

1. Derive the Rayleigh distribution following the outline on pp. 67-68. Show all steps and details.

2. Drive the Rician distribution following the outline on pp. 69-71. Show all steps and details.

3. Problem 5.10.

4. Following Example 5.1 on page 314, derive the Schwarz inequality.

5. Show that the basis functions in Eq. (5.19) and in Eq. (5.24) are orthonormal.