

ECE 520.651 Random Signal Analysis

Homework # 4

Due 9:00 AM on Friday, October 5, 2007.

Review Chapters 3 and 4 from Stark and Woods before starting the homework.

1. Solve problem **3.7** from Stark and Woods.
2. Solve problem **3.19** from Stark and Woods.
3. Solve problem **3.25** from Stark and Woods.
4. Solve problem **3.29** from Stark and Woods; compute $f_{ZW}(z, w)$ before answering.
5. Solve problem **4.42** from Stark and Woods. Hint: use $\theta_X(t)$ or $\Phi_X(\omega)$.

A collection of related concepts have now been covered and this is a good time, after finishing the homework, to *review* Chapters 1–4 from Stark and Woods and pages 1-64 from Prof. Papamarcou's notes. This will be *very helpful* going forward.