

NAME:

EE538 Digital Signal Processing I
Exam 1

Fall 2014
Friday, Sept. 29, 2014

Cover Sheet

Write your name on this and every page

Test Duration: 60 minutes.

Coverage: Chapters 1-5.

Open Book but Closed Notes.

Calculators NOT allowed.

This test contains **three** problems.

Show your work in the space provided for each problem.

You must show all work for each problem to receive full credit.

Always simplify your answers as much as possible.

Prob. No.	Topic(s)	Points
1.	Frequency Response and Interconnection of LTI Systems, Pole-Zero Diagrams	35
2.	DT Autocorrelation, Cross-Correlation and their Related Properties	30
3.	LTI Systems: Expressing Cross-Correlation in terms of Convolution	35