

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Department of Electrical and Computer Engineering
ECE 498MH SIGNAL AND IMAGE ANALYSIS

Homework 3
Fall 2014

Assigned: 2/21/2017

Due: 2/21/2017

Reading: 1–40

Problem 3.1

(a) The plot should be a stem plot showing the following nonzero terms:

(b)

$$y(t) = 2 + 3 \cos(880\pi t) - \sin(680\pi t)$$

Problem 3.2

(a) The plot should be a stem plot showing the following nonzero terms:

(b)

$$y(t) = 2 + 3 \cos(1020\pi t) - \sin(940\pi t)$$

ω
0
0.68
0.88
1.12
1.32

ω
0
0.47
0.51
1.49
1.53