Homework 1, ENEE641/ENME808X, Fall 2018
Due: September 17, in class.
Exercises 3.1-1, 3.1-2, 3.1-4 and 3.1-8 on p. 52-53. [2 ${ }^{\text {nd }}$ edition: p. 50-51]

Problem 4-1 p. 107.
[2 ${ }^{\text {nd }}$ edition:
a. $T(n)=2 T(n / 2)+n^{4}$
b. $T(n)=T(7 n / 10)+n$

Problem 4-1, items c, d, e and f, p. 85
g. $\left.T(n)=T(n-2)+n^{2}\right]$

Problem A (not from the textbook):
Consider the recurrence $T(n)=2 T(n / 2)+n \log n$.
Can you solve it using the Master theory studied in class? If you can, solve it. If not, explain why.

