## Problem Set 1

CSCE 411-502 (Dr. Klappenecker)

**Due dates:** Electronic submission of .tex and .pdf files of this homework is due on 9/9/2015 before 11:00am on e-campus (as a turnitin assignment), a signed paper copy of the pdf file is due on 9/9/2015 at the beginning of class.

Name: (put your name here)

**Resources.** (All people, books, articles, web pages, etc. that have been consulted when producing your answers to this homework)

On my honor, as an Aggie, I have neither given nor received any unauthorized aid on any portion of the academic work included in this assignment. Furthermore, I have disclosed all resources (people, books, web sites, etc.) that have been used to prepare this homework.

Signature:		

Get familiar with LATEX. Watch the (optional) video. All exercises are from the lecture notes that were (or will) be handed out in class.

**Problem 1.** (10 points) Exercise 7.2.

Solution.

Problem 2. (10 points) Exercise 7.4.

Solution.

**Problem 3.** (10 points) Exercise 7.8.

Solution.

**Problem 4.** (10 points) Exercise 7.14.

Solution.

**Problem 5.** (10 points) Exercise 7.16 (use finite difference calculus).

Solution.

**Problem 6.** (10 points) Exercise 7.17.

Solution.

Watch the video on asymptotic notations.

Problem 7. (10 points) Exercise 9.2.

Solution.

Problem 8. (10 points) Exercise 9.6.

Solution.

**Problem 9.** (10 points) Exercise 9.15.

Solution.

Problem 10. (10 points) Exercise 9.21.

Solution.

I will allow that you explore some of the problems in class together with your team,  $\mathbf{but}$  the homework solution must be formulated by yourself. Homeworks must be typeset in  $\LaTeX$ 

## Solution.

## Checklist:

- $\square$  Did you add your name?
- □ Did you disclose all resources that you have used?

  (This includes all people, books, websites, etc. that you have consulted)
- □ Did you sign that you followed the Aggie honor code?
- $\square$  Did you solve all problems?
- □ Did you submit (a) your latex source file and (b) the resulting pdf file of your homework?
- □ Did you submit (c) a hardcopy of the pdf file in class?