Math 134, Fall 2014, Homework 3

The problems are from Calculus, One and Several Variables, 10th Edition by Salas, Hille and Etgen.

For practice - do not hand in

Section 11.1, Problems 1-20, 24, 30
Section 2.6, Problems 2, 4, 10, 14, 16, 20, 24, 30
Section 3.1, Problems 3, 29, 30, 46, 51
Section 3.2, Problems 13-20, 33, 44, 54
Section 3.3, Problems 32, 33
Section 3.4, Problem 2
Section 3.5, Problems 39-42, 65, 68
Section 3.6, Problems 19-24, 60

To hand in

Section 11.1, Problems 25, 28 (prove your claim)
Section 2.6, Problem 32

Also,

1. Answer the question at http://www.math.columbia.edu/~rizzardo/calc06/ivt.pdf

   (If you copy and paste, make sure you fix the tilde in the address.)

2. Find an interesting Intermediate Value Theorem application online or somewhere else. Interesting means that there is a story behind it and that you have to set up the notation and the function. So the one with the link above and question 32 in 2.6 qualify as interesting, questions 1-10 in Section 2.6 not so much. Answer your question. It's ok if some of you have the same questions. I hope to see 4-5 different ones in the class overall.

Section 3.1, Problems 52, 58
Section 3.2, Problems 50, 59
Section 3.3, Problem 54
Section 3.4, Problem 14
Section 3.5, Problem 62
Section 3.6, Problem 70