

# APMA 1930M: Homework Assignment # 1

Due: 9/12/14

## Problem 1 Algebraic Equations

For  $0 < \epsilon \ll 1$  find approximate solutions for the following equations:

1.  $\epsilon x^3 - (x - 1)(x - 2) = 0.$

2.  $\epsilon x^3 - (x - 1)^2 = 0.$

**Hint:** Draw graphs.

## Problem 2 Order Symbols

Complete exercises 1.1, 1.2, 1.3, 1.4 on page 6 of the text.