Math 310 Assignment 3

PROBLEMS: 3.15, 3.18, 3.19, 3.22, 3.23, 3.26, 3.35, 3.41, 3.55, 4.6, 4.11

The problems above are DUE FRIDAY, OCTOBER 19th at lecture or during office hours.

HOMEWORK NOTES/HINTS

• Problem 3.19: Consider 3 cases, $x < 0 < y$, $0 \leq x < y$, and $x < y \leq 0$. One of these cases can be proved quickly, the other two require induction.

• Problem 3.41: Part (a) should be quick (that is, don’t use induction). But induction may be a good idea on part (b).

• Problem 3.55: There are 2 base steps and you should be using the strong form of mathematical induction.

• If you finish the homework early or if you are looking for some extra practice try the following problems:
  
  CHALLENGE PROBLEMS: 3.38, 3.39, 3.56

  These are not due, but if you complete them all correctly and hand them in with your homework, I will award at least 1/2 a point of extra credit per challenge problem completed.