MA341 Fall 2017 Review for Exam 1

- 1. p.15 #4
- 2. p.16 #16
- 3. p.37 State the definition of upper bound and lower bound (this is 2.3.1) and state the defition of sup S (this is 2.3.2)
- 4. p.48 State Nested Interval Property (this is 2.5.2)
- 5. p.56 State and prove Uniqueness of Limits (this is 3.1.4)
- 6. pp.64-65 Prove all 5 Limit Laws in 3.2.3 parts (a) and (b), the theorem will be stated for you and you will prove it.
- 7. p.68 Prove Theorem 3.2.10, the theorem will be stated for you and you will prove it.
- 8. pp.71-72 State and prove Monotone Convergence Theorem part (a) (this is 3.3.2)
- 9. p.77 #1
- 10. pp.81-82 State the Bolzano-Weierstrass Theorem (this is 3.4.8) and give the Second Proof
- 11. p.84 #7b, #7c
- 12. p.86 Prove Lemma 3.5.4, the lemma will be stated for you and you will prove it.
- 13. p.91 #4