Sequences

Reading

Section 11.1 up to page 548

Problems

• Practice Problems: 11.1 3, 5, 11, 17, 23, 25, 35, 41

• Problems to turn in: 11.1 16, 26, 48

Topics to know

- 1. Relation between series and sequences
- 2. Definition of a sequence
- 3. Basic examples of sequences and their visualizations
- 4. Sequences defined recursively (Key example: Sequence that approaches root, example 1)
- 5. Definition of limit of sequence, both intuitive and precise
- 6. Sequences derived from functions (theorem 1)
- 7. Geometric sequence (example 6)
- 8. Limit laws for sequences, squeeze theorem
- 9. A sequence that absolutely converges to 0 also converges to 0
- 10. Geometric sequence for negative r (example 8)
- 11. Using squeeze theorem for convergence of more complicated forms (example 9)