

Series

Reading

Section 11.2

Problems

- Practice Problems: 11.2 1, 2, 3, 4, 8, 11, 13, 17, 19, 22, 29, 31, 33
- Problems to turn in: 11.2 12, 14, 18, 30, 34
- Challenge (optional): 11.2 39, 41

Topics to know

1. Series, sigma notation
2. Partial sums, definition of series convergence
3. Telescoping series (example 2)
4. Sum and scalar product of series (theorem 1)
5. Geometric Series (theorem 2)
6. Example 5
7. Divergence Test
8. Counter-example 8 for converse of divergence test: $\sum \frac{1}{\sqrt{n}}$