Homework 4
Due Friday, September 23rd at 5pm

Reading: Read Boas Ch. 3, sections 5 through 10.

1. Ch2 6.6.

2. Ch1 7.9 and Ch2 6.1.

3. Find the disk of convergence of the two series below. For each series plot the disk of convergence in the complex z-plane.

$$\sum_{n=0}^{\infty} \left(\frac{z}{2}\right)^n \qquad \text{and} \qquad \sum_{n=0}^{\infty} n(n+1)(z-2i)^n.$$

4. Ch2 9.27, 9.28, 9.35, and 9.38.

5. Ch2 11.10 and 11.14.

6. Ch2 12.2, 12.33, and 12.38.

7. Ch2 14.7 and 14.23.