

**Textbook problems** from Stewart *Calculus*, 7th edition.

- §11.6: 18, 24, 25
- §11.8: 6, 8, 9, 13, 15, 17, 19, 23, 25, 26

**Supplementary problems:**

1. Determine whether the following series is absolutely convergent, conditionally convergent, or divergent.

$$\sum_{n=1}^{\infty} \frac{(-1)^n (2n)!}{e^{2n} \cdot n! \cdot n^n}$$

2. Find the radius of convergence of the following power series.

$$\sum_{n=1}^{\infty} \frac{n^n}{n!} x^n$$