Name: _____ **Section:** 201 (starts at 08:00)
202 (starts at 09:35)

1. (3 points) How many terms of series $\sum_{i=1}^{\infty} \dfrac{(-1)^n n}{4^n}$ do we need to sum up to get the sum with error not exceeding 0.002?

2. (4 points) For which values of x is the series $\sum_{n=1}^{\infty} n! x^n$ convergent?

3. (3 points) Find a power series representation for $\ln(3 + x)$.