Exercise 1 (5 points)

The series \( \sum_{n=1}^{\infty} \frac{(-1)^n \cdot (n!)^2}{(2n)!} \) is

- Conditionally convergent
- Absolutely divergent
- Divergent
- Absolutely Convergent
- Divergent by AST

Exercise 2 (5 points). The values of \( p \) for which the series \( \sum_{n=2}^{\infty} \frac{1}{n \ln n^{p-1}} \) is convergent are:

- \( p \geq 2 \)
- \( p \geq 1 \)
- \( p \leq 2 \)
- \( p \leq 1 \)
- \( p \geq 3 \)
Exercise 1 (5 points) The series \( \sum_{n=1}^{\infty} \frac{(-1)^n (n!)^3}{(3n)!} \) is

- Conditionally convergent
- Absolutely divergent
- Divergent
- Absolutely Convergent
- Divergent by AST

Exercise 2 (5 points)
The values of \( p \) for which the series \( \sum_{n=1}^{\infty} \frac{e^n}{(1 + e^n)^{p-1}} \) is convergent are:

- \( p \geq 2 \)
- \( p \geq 1 \)
- \( p \leq 2 \)
- \( p \leq 1 \)
- \( p \geq 3 \)