Quiz no. 5 (1220-5 Calculus II, Fall 2006)  
November 7, 2006

25 min. No symbolic calculators allowed (TI-89 and similar)!  
(TI-86 or lower are allowed.)

1. (10 points) Which of the following series converge? Which of them converge absolutely?

   (a) \[ \sum_{n=2}^{\infty} \frac{(-1)^n}{n \ln n} \]

   (b) \[ \frac{1}{1} + \frac{1}{2} - \frac{1}{4} + \frac{1}{8} + \frac{1}{16} - \frac{1}{32} + \frac{1}{64} + \frac{1}{128} - \frac{1}{256} = \]

2. (15 points) Find the set of convergence for the following power series:

   (a) \[ \sum_{n=0}^{\infty} \frac{1}{n! \cdot n} x^n \]
(b) 

\[ \sum_{n=0}^{\infty} \frac{(x - 4)^n}{n^3} \]