

# Math 1B Quiz 8

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<http://math.berkeley.edu/~theo/f/08Summer1B/>

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Name: \_\_\_\_\_ Score: \_\_\_\_\_ /10

*You have twenty minutes (plus the break) to complete the following closed-note open-chalkboard quiz. Partial credit will be awarded for correct work, and no points will be given for simply writing down the correct answer. Please box your final answers. Use the back of the page as necessary.*

1. (5 pts) Determine whether the following series converges absolutely, converges conditionally, or diverges. Explain how you know.

$$\sum_{n=0}^{\infty} \frac{(-1)^n n^2}{2^n n!}$$

2. (0 pts) What is the next number in the following sequence?

4, 14, 23, 34, 42, 50, ...

3. (5 pts) Determine whether the following series converges absolutely, converges conditionally, or diverges. Explain how you know.

$$\sum_{n=0}^{\infty} \frac{(-1)^n}{n + e^{-n}}$$