Math 126: Calculus II Name:_____
Quiz 8 *November 2, 1999* Section:_____

Show that each of the following series converges. *Be sure to indicate the test you are using and include all important steps in your work.*

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1. $\displaystyle\sum_{n=1}^{\infty} \frac{1+\sin(n)}{3^n}$

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2. $\displaystyle\sum_{n=1}^{\infty} \frac{(-1)^n}{\sqrt{n}+\sqrt{n+1}}$

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3. $\displaystyle\sum_{n=1}^{\infty} \frac{(10+n)^{10}}{n!}$

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4. $\displaystyle\sum_{n=1}^{\infty} \frac{n^n}{(2n+1)^n}$

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5. $\displaystyle\sum_{n=2}^{\infty} \frac{\ln(n)}{n^2}$