NAME:

Quiz 8

Clear your desk of everything except pens, pencils and erasers. **Show all your work.**
If you have a question raise your hand and I will come to you. GRADE YOUR OWN QUIZ!

For each series below, determine whether it is convergent or divergent.
Write out your solutions clearly, as you would on an exam.

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

2. $\displaystyle\sum_{n=1}^{\infty} \frac{n^2 2^{n-1}}{(-5)^n}$.

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

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

5. $\displaystyle\sum_{n=1}^{\infty} ne^{-n^2}$.