Name _____

Homework 17
section 9.4

Determine whether each series converges or diverges by using an appropriate test.
Use the following tests once each:

Basic comparison test	Ratio test
Integral test	Limit comparison test

Be sure to state which test you are using and, if applicable, what series you are using for comparison.

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

2. (5) $\displaystyle\sum_{n=1}^{\infty} \frac{n^5 + 4n^3 + 1}{2n^8 + n^4 + 2}$

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

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