

9.3 Convergence of Series

Name:

Date:

P 1. Find the first five terms of the sequence of partial sums for

$$\sum_{n=1}^{\infty} n$$

P 2. Find the first five terms of the sequence of partial sums for

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

P 3. Find the first five terms of the sequence of partial sums for

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

P 4. Use the integral test to decide whether the series converges or diverges.

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

P 5. Use the integral test to decide whether the series converges or diverges.

$$\sum_{n=1}^{\infty} \frac{n}{n^2 + 1}$$

P 6. Use the integral test to decide whether the series converges or diverges.

$$\sum_{n=1}^{\infty} \frac{1}{e^n}$$

P 7. Use the integral test to decide whether the series converges or diverges.

$$\sum_{n=2}^{\infty} \frac{1}{n(\ln n)^2}$$