Math 001C Assignment 11.4 Name:_____

DIRECTIONS To receive full credit, you must provide complete legible solutions to the following problems in the space provided. No Attached papers. Transfer all your answers to the space provided. Use Methods studied in sections 11.1 to 11.4.

1. Determine whether the series converges or diverges.

$$\sum_{n=1}^{\infty}\left(\frac{n^3}{4n^4-2}\right)$$

2. Determine whether the series converges or diverges.

$$\sum_{i=1}^{\infty}\frac{5}{\sqrt{n^2+5}}$$

3. Determine whether the series converges or diverges.

$$\sum_{i=1}^{\infty} \frac{3^n}{2+4^n}$$

4. Determine whether the series converges or diverges

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

5. Use the sum of the first 10 terms to approximate the sum S of the series then estimate the error. (Round your answers to five decimal places.)

$$\sum_{n=1}^{\infty} \frac{13}{1+2^n}$$

Ans:

Error: