

11.4 - Comparison Test

Calculus II

Determine if the series converges or diverges

1. $\sum_{n=4}^{\infty} \frac{n^2}{n^3-3}$

$a_n =$

$b_n =$

2. $\sum_{n=2}^{\infty} \frac{7}{n(n+1)}$

$a_n =$

$b_n =$

3. $\sum_{n=2}^{\infty} \frac{n-1}{\sqrt{n^6+1}}$

$a_n =$

$b_n =$

4. $\sum_{n=3}^{\infty} \frac{e^{-n}}{n^2+2n}$

$a_n =$

$b_n =$

5. $\sum_{n=1}^{\infty} \frac{4n^2-n}{n^3+9}$

$a_n =$

$b_n =$

11.5 - Alternating Series Test

Calculus II

Determine if the series converges or diverges

1. $\sum_{n=1}^{\infty} \frac{(-1)^{n-1}}{7+2n}$
 $b_n =$

2. $\sum_{n=0}^{\infty} \frac{(-1)^{n+3}}{n^3+4n+1}$
 $b_n =$

3. $\sum_{n=0}^{\infty} \frac{1}{(-1)^n(2^n+3^n)}$
 $b_n =$

4. $\sum_{n=0}^{\infty} \frac{(-1)^{n+6}n}{n^2+9}$
 $b_n =$

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