

1. Determine whether each series converges or diverges.

a.) 
$$\sum_{n=1}^{\infty} \frac{\ln n}{n}$$

b.) 
$$\sum_{n=4}^{\infty} \frac{1}{2^n - 9}$$

Try Divergence Test:

Try Limit Comparison Test (LCT):

Try  $b_n =$   and  $b_n =$   and  $b_n =$  .

2. Determine whether each series is convergent or divergent.

i.)  $\sum_{n=1}^{\infty} \frac{2n^2 + 3n}{\sqrt{5 + n^5}}$

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

Try Divergence Test:

Try Limit Comparison Test (LCT):

Try  $b_n =$   and  $b_n =$   and  $b_n =$  .