

Homework1

1. Determine the convergence or divergence of the sequence with the given nth term. If the sequence converges, find its limit.

$$a_n = \frac{\ln(n^3)}{2n}$$

2. Determine the convergence or divergence of the series.

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