



Limit Comparison Test

Question

Consider the series $\sum_{n=1}^{\infty} \frac{\sqrt[3]{n^4 + 7n}}{n^5 + \sqrt{n}}$. Which of the following simpler series would be most useful in applying the limit comparison test to this series?

A. $\sum_{n=1}^{\infty} \frac{\sqrt[3]{n}}{n^5}$

B. $\sum_{n=1}^{\infty} \frac{1}{n^4}$

C. $\sum_{n=1}^{\infty} \frac{1}{n^{11/3}}$

D. $\sum_{n=1}^{\infty} \frac{n^{4/3}}{n^5 + \sqrt{n}}$

E. $\sum_{n=1}^{\infty} \frac{1}{n}$