

Quiz 11

Time:10min

Choose one of the following problems:

1. Show that $\sum_{n=1}^{\infty} \frac{2n}{n^2+1}$ does not converge.
2. (a) If $\sum_{n=1}^{\infty} a_n$ converges, what can we conclude about $\lim_{n \rightarrow \infty} a_n$?
(b) Conversely, if $\lim_{n \rightarrow \infty} a_n = 0$, can we conclude anything about the convergence of the series $\sum_{n=1}^{\infty} a_n$?