

Definition of a Subsequence

Since Royden never defines what it means for $\langle x_{n_k} \rangle$ to be a **subsequence** of $\langle x_n \rangle$, let me remind you: The integers n_k must satisfy the condition

$$n_1 < n_2 < n_3 < \cdots,$$

or in other words

$$n_k < n_{k+1}$$

for all $k \in \mathbb{Z}^+$.

Use this definition in any problems involving subsequences, which means, at the moment, p. 38: 8 and 9b.