## Increasing sequence

A sequence $u_{1}, u_{2}, \ldots$ is called increasing if $u_{n} \leq u_{n+1}$ for all $n \geq 1$ (so $u_{1} \leq u_{2} \leq u_{3} \leq \cdots$ ). It is called strictly increasing if $u_{n}<u_{n+1}$ for all $n \geq 1$.

See also decreasing sequence.

