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

