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$$\Delta(a_n \Delta x_n) + q_n f(x_n + 1) = 0, n = 0, 1, 2, \dots \quad (*)$$

where $a_n > 0, q_n > 0$ for all $n \geq 0$ and $f : \mathbf{R} \rightarrow \mathbf{R}$ is continuous such that $uf(u) > 0$ for $u \neq 0$. Dividing the solutions of (*) into several classes, the authors obtain conditions for the existence and non-existence of solutions in these classes.

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