Portens, Evan L.

ON THE OPTIMALITY OF GENERALIZED (s, S) POLICIES

MANAGEMENT SCI. 17, 1970/71, pp. 411–426

The author presents a standard inventory model with a concave increasing ordering cost function rather simply a linear one with set up cost a generalized (s, S) policy in the n-period problem. A function f quasi-K-convex on a convex set X is defined.

Let $C\ (K)$, for $K \geqslant 0$, denoting the class of continous $C_a\ (K)$ functions for $a \in R$. If $f \in C_a\ (K)$ for some $a \in R$ and φ is a onesided Polya density, then

$$f * \varphi(y) = \int_0^\infty f(y - \xi)\ \varphi(\xi)\ d\ \xi \in C(K)$$

M. S.