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Mexico. The set functions \mathcal{T} and \mathcal{K} on irreducible continua. Preliminary report.

Given a continuum X, the set C(X) is the set of all subcontinua of X. The set function \mathcal{T} is defined as follows: for each $A \subseteq X$, $\mathcal{T}(A) = \{x \in X \mid \text{ if } W \in C(X) \text{ and } x \in Int(W), \text{ then } W \cap A \neq \emptyset\}$. Also, the set function \mathcal{K} is defined as follows: for each $A \subseteq X$, $\mathcal{K}(A) = \bigcap \{W \in C(X) \mid A \subseteq Int(W)\}$. A continuum X is irreducible if there exist two points of X such that no proper subcontinuum of X contains both points. Some properties of the set functions \mathcal{T} and \mathcal{K} on irreducible continua are going to be presented. (Received August 04, 2009)