

(Abstract):

In a recent paper. Sharp, Jr., has discussed the problem of finding formulae for the following naturally defined integers: the numbers $t(n)$, $tc(n)$, $to(n)$, $tco(n)$, and $ts(n)$ of all homeomorphism classes of finite topological spaces with n elements, which are respectively (i) arbitrary, (ii) connected, (iii) T_0 , (iv) connected and T_0 , (v) symmetric. Here, a finite topological space X is called *symmetric* provided the following relation

\wedge is symmetric: $x \wedge y$ if and only if $x \in U_y$, the intersection of all open sets containing y .

In this context, consider also the following integers: the numbers $Ps(n)$, $r(n)$, $m(n)$ and $u(n)$ of all homeomorphism classes of finite topological spaces with n elements, which are respectively (i) pseudo-metrizable, (ii) regular, (iii) measurable, (iv) uniformizable. Here, a topological space X will be called *regular* provided *only* that every closed subset can be separated in the usual way from any point in its complement, and X will be called *measurable* provided every open set is also closed.