1014-26-1735 Kandasamy Muthuvel* (muthuvel@uwosh.edu), Department of mathematics, University of Wisconsin-Oshkosh, 800 Algoma Blvd, Oshkosh, WI 54901-8631. A note on 2-to-1 function. Preliminary report.
A function $f: R \longrightarrow R$ is called a $n$-to- 1 function if $\left|f^{-1}(y)\right|=n$ or $0 \forall y \in R$. It is proved in [1] that, for a natural number $n, n$ is odd if and only if there exists a continuous $n$-to- 1 function $f: R \longrightarrow R$. In this talk we discuss some properties of $n$-to- 1 function. In particular, we show that the cardinality of the set of discontinuous points of any 2-to-1 function is infinite.
[1] K. Ciesielski, R.G. Gibson, T. Natkaniec, к-to-1 Darboux-Like Function, Real Analysis Exch.23(2),(1997-98), 671-687. (Received September 29, 2005)

