

**Title:** The Cardinal of Various Monoids of Transformations That Preserve a Uniform Partition

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**Abstract:** In this paper we give formulas for the number of elements of the monoids  $ORM \times n$  of all full transformations on it finite chain with  $tun$  elements that preserve it uniform  $m$ -partition and preserve or reverse the orientation and for its submonoids  $ODm \times n$  of all order-preserving or order-reversing elements,  $OPm \times n$  of all orientation-preserving elements,  $O-m \times n$  of all order-preserving elements,  $O-m \times n(+)$  of all extensive order-preserving elements and  $O-m \times n(-)$  of all co-extensive order-preserving elements.

**Author Keywords:** Order-Preserving/Reversing; Orientation-Preserving/Reversing; Extensive; Equivalence-Preserving; Transformations.

**KeyWords Plus:** Finite Chain; Semidirect Products; Greens Relations; Semigroups; Order; Orientation; Mappings; Equivalence; Idempotent; Regularity

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