

NEAR RING STRUCTURE EXAMINE REGARDS IN MATHEMATICAL FUNCTIONS

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Abstract— In mathematics, a near ring structure form a special class of algebraic structure which is similar to a ring but fulfilling smaller amount of axioms. Begin Near Ring Structure logically comes from functions on groups. A set N together to form a two binary operations + (called addition) and · (called multiplication) is called a (right) near-ring, condition: In called addition N is a group (not accordingly abelian); In called development is associative (so N is a semi group under multiplication); Likewise, to define a left near-ring by substituting the right distributive law A3 probably by the subsequently the left distributive law. For graphic, the book of Pill uses correct near-rings; while the book of soil uses left near-rings where as from both R and L close to-rings occur in the literature survey. One-sided distributive law says that, if it is and after that distributive on mutual sides is adequate, and automatically follows commutatively of addition.

Keywords – Multiplication, Mathematics, literature

I INTRODUCTION

A Ring is a set with two binary operations: a commutative addition that forms a Group, and an associative multiplication that has an identity element and distributes over addition. Our usual addition and multiplication over the set of Integers is a Ring.

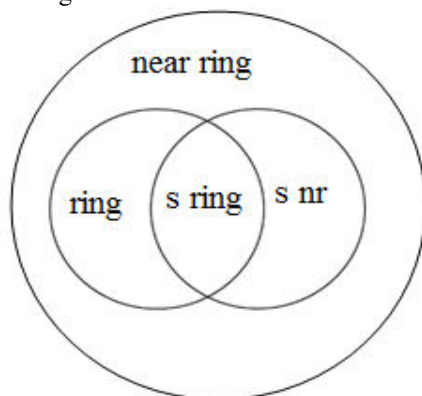


Fig 1.1 near ring structure

In logic, fig1.1near ring structure gives a two ring or group intersects to form a near-rings of s ring. Then it offers a nonlinear analogue to the improvement of linear algebra. It also has a great significance as a basis of ideas for linear functional analysis but definitely linear algebra is a focus of enormous applicability.

Linear functional analysis grow away of linear algebra in corresponds to the requirement of linear differential equations. Facts of near-rings alone through a excellent measurement of the required modern nonlinear differential equations direct to development in nonlinear functional analysis such as a "nonlinear Gleaned theory" or Nonlinear spectral theory. Near-rings of Lipchitz, zero-fixing renewal from a eliminate space to itself seem to be may be valuable for applications.

Distributively brings about near-ring Structure:

Let $mg S$ denotes the subgroup of $K(G)$ generated as S . Thus, $mg S = \{ f = \dots \}$. It is a clear-cut to verify that $mg S$ is a near ring, zero-symmetric and with its characteristics.

Centralized brings about near-ring Structure:

Let $S = \{ f \in K(G) \mid f(\sigma) = \dots \}$. Since S consists of the zero map. To determine near-ring with identity.

An perfect I of marital is call a half major perfect if while total principles J of marital semi prime if $x_1 \in I$ at any time $x_2 \in I$. N is called a severely major near-ring is a severely major perfect i.e. A and B are N-subgroups of k such that then either

II WEAKENED FORMS OF P (1, 2) AND P (2, 1) NEAR – RINGS

In this chapter we begin the concepts of Weak P(1,2) and Weak P(2,1) near- rings. We state that N is Weak P(1,2) (Weak P(2,1)) if $x N = y N, Nx^2 = Ny^2$ for x, y in N ($Nx = Ny \quad x^2N = y^2N$ for x, y in N) . An example to for each of these concepts is dissimilar in common. Weak P (1, 2) (Weak P (2, 1)) is a generalization of P (1,2) (P(2,1)).

The characterization of Weak P (1, 2) near-rings which admit mate functions. We show that the concepts of Weak P (1, 2), Weak P(2,1), P(1,2) and P(2,1) are all equivalent in a Ring with mate functions. We be a P (1, 2) near- ring. We prove that the concept of Weak P (1,2) is preserved under homomorphism's and also obtain a structure theorem for Weak P(1,2) near – rings. Towards the end of this chapter we discuss briefly the relation between the concepts of Weak P (1, 2) and Weak P (2, 1) in a near – ring.

The material of notation looks mostly important purpose of passing the way from linear to nonlinear problem. A right notation of linear analysis have possessing a long transformation T on a vector space Nobody tells about the “linear transformation T(y)” where y denotes as to be a “changeable” vectors. An expletive of the function f(*) at the rest of moment being solicit by appropriately defined as called addition and called multiplication. Wide variety of resolution of this near ring structure will be look at the general recognition of the basic function of an ring aspects. It is virtually self-sufficient for one known with ring theory.

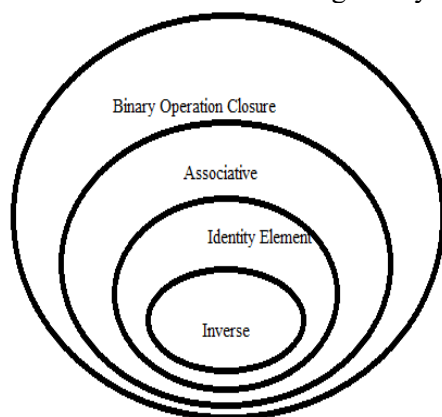


Fig 1.2 representation of a ring under addition and multiplication

Fig1.2 representing a ring together with an operation in some Initial approaches into near-rings determine to achieve the related notation of a N belongs to inverse, identity element, Associative of an called addition and called multiplication in a binary operation closure.

There is an ordinary notation of a subgroup K of $(MV,+)$ is an perfect in N. Suppose(a) LN: EL and $n(n' +)$ together to the right perfect match of a homomorphism image of N. Be short of involving left and right ideals is representative of N-groups. To directly link with near-rings are N-groups. A variety of disintegration theorems for near-rings For a near-ring N and Group $(s, +)$, MQ: K Such an MQ-group is denoted by ${}_N K$.

III RING (MATHEMATICS)

Ring Mathematics consisting of two binary operations called addition and called multiplication i.e., belongs to an algebraic structure of an abelian group and a monoid groups. In this an ring axioms involve that called addition and called multiplication such that called addition is commutative and called multiplication is commutative distributes all over element of an additive inverse with its ordinary operations of addition and multiplication. The majority of an example ring is an integer .

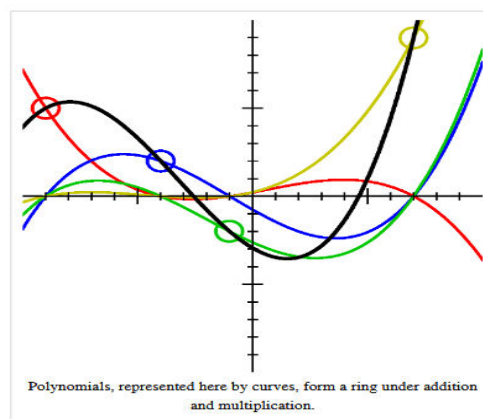


Fig 1.2 graph representation of a ring under addition and multiplication

Fig 1.2 Representing the near-ring of a graph to be form as a polynomials addition and multiplication. Describes some of the ideas which indicates some structure theory for near-rings.

Therom1.1:

Let N be a near-ring. Then there endures a group G and a semi group S of endomorphism's G'.

Proof:

For every one a G is a group N is mapping to x and y of called addition and called subtraction .whereas, (x)=x a' N and (y)=y b' N is an endomorphism's of (N,+). Then, On behalf of N= Ks(N).

Therefore, While Ks(G) is a common as possible , in order to attain a specific structure results,

IV GEOMETRY AND NEAR-RING MONOIDS:

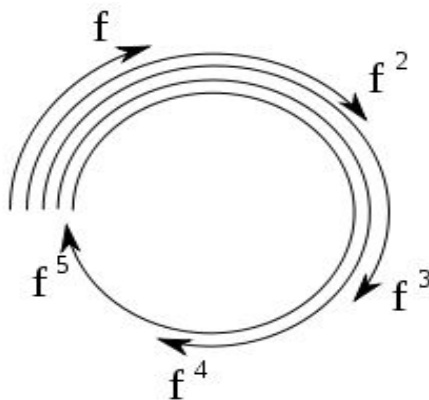


Fig1.3 Near Ring Monoid

In this chapter, we have introducing the concepts of Near-Ring Monoid. Fig 1.3 promotes the logical calculation of addition and multiplication in a directs sums and multiplication of an algebraic structure towards of functions f, , , . At last of the function forms a near-ring monoids.

V PROPOSED WORK THEORM ANALYSIS

Theorem 1.2.

Let N be a strong A1 near-ring. Condition N is Boolean structure of the followings are true.

- (i) $K = e, f \in N$.
- (ii) N-sub groups convert with one another of all its principle.
- (iii) All N is a well-built A1 of near-ring is perfect.

(iv) All N-subgroup of N is a well-built A1 near-ring.

(v) All N-subgroup of N is parallel to N-subgroup of N.

Proof:

(i) Since N is a well-built A1 near-ring, for $e, f \in N$.

Let $e, f \in N$. Since N is Boolean, $e = e^2 \in N$. That is $e \in N$

Let $y \in N$.

Then there exist $n, n' \in N$ such as $y = n + n'$

Thus, $y = n + n'$.

(ii) Let $e, f \in N$. Now, $e = e^2$ [by (i)] = $e + e$. As a preferred result follows.

(iii) Let I be a superlative of N. Now $I = I^2$ [since N is Boolean] = $(e + f)I = eI + fI = e + f$. Therefore, $I = e + f$. Thue I is a well-built A1 of near-ring is perfect.

(iv) Let K be an N-subgroup of N. Consequently, $NK = M$. For any $x, y \in K$, let $z = x + y$ [since $K \subseteq N$] = $yx = x + y$ [since N is Boolean] = $(x + y)yx = (NK)yx = x + y$. with the purpose of $z = x + y$. Therefore, $K = M$. Similarly $K = M$. Therefore $K = M$. Thus K

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