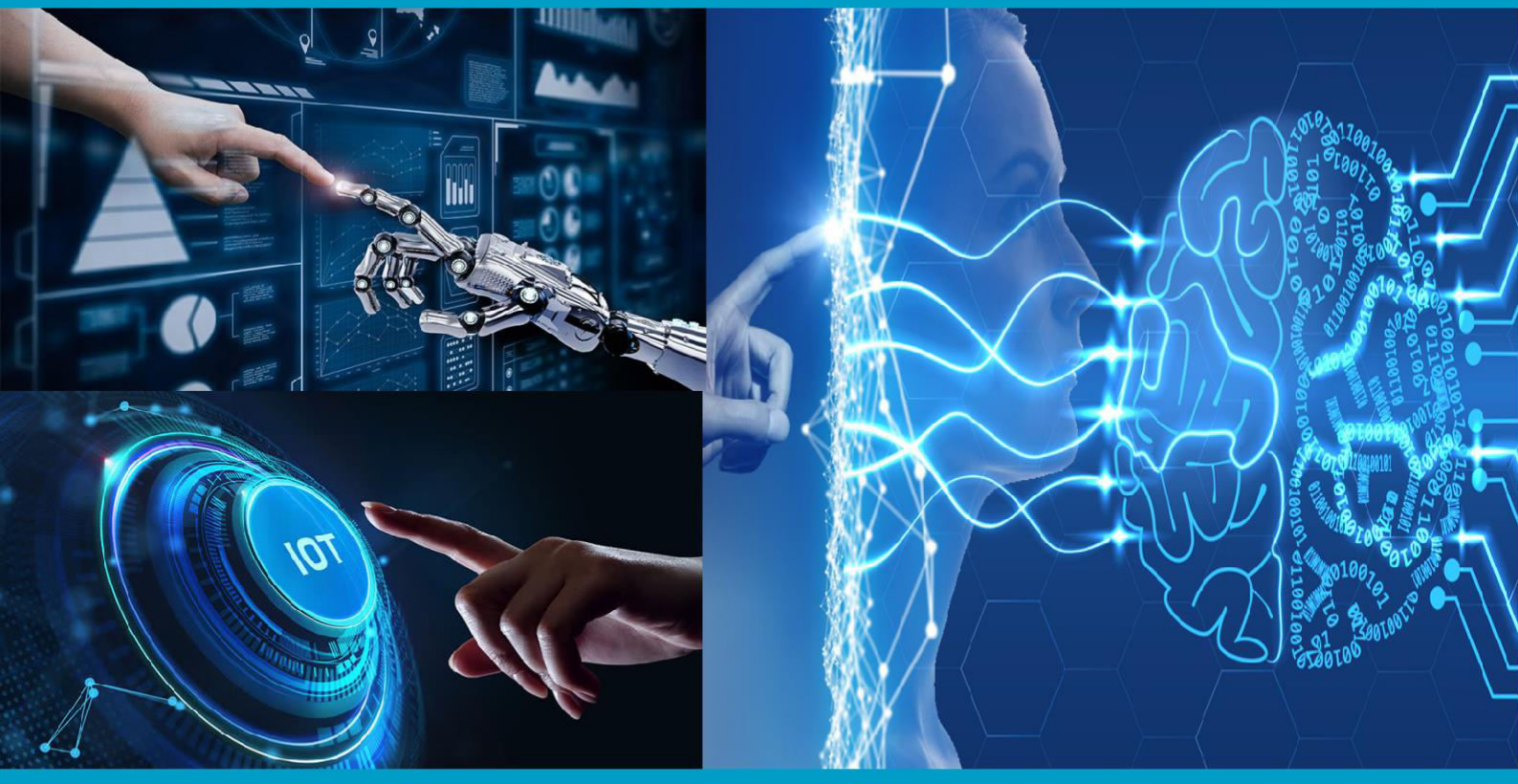
IJMRSETM

e-ISSN: 2395 - 7639



INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH

IN SCIENCE, ENGINEERING, TECHNOLOGY AND MANAGEMENT

Volume 11, Issue 10, October 2024

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 7.802

+91 99405 72462 +9163819 07438 ijmrsetm@gmail.com www.ijmrsetm.com

International Journal of Multidisciplinary Research in Science, Engineering, Technology & Management (IJMRSETM)

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.802 | A Monthly Double-Blind Peer Reviewed Journal |

| Volume 11, Issue 10, October 2024 |

Equations and Numbers

Mr. Harshvardhan

Department of Mathematics, G.B. Pant Memorial Government College, Rampur Bushehar, Shimla (H.P), India

ABSTRACT: We Discuss Relationship Between Determinants. Determinants Play an Important Role in Mathematics In Mathematics There is a lotys Of Use Of Determinants. We Discuss Relationship Between Numbers We Divide Number and The We Get The Result. Numbers play an Important Role in Mathematics. There is Lots Of Use Numbers in Mathematics. We Discuss Functions in this paper. In Mathematics There is a Lots of Use of Sequences. In Mathematics There is a Lots of Differtial Equations. Differetial Equation play an Important Role In Mathematics. We Also Discuss Realtionship Between Functions We Derivative Them and then We Get The Result. We also Discuss Equation this Paper. We Also Discuss Imaginay numbers in this paper.

KEY WORLDS: Numbers , Functions, Determinants, Imaginary Functions.

I. INTRODUCTION

We Prove Relationship Between Numbers and Variables Play an Important Role In Pure Mathematics. In Mathematics Numbers and Variables Play an Important Role. We Discuss Relationship between Numbers and We also Discuss Relationship between Functions Play an Important Role in Mathematics. There Is a Lot Of Use Of Functions.

Heading1.1:
There Exist Relationship Between Numbers and Functions. There is Exist a Relationship between Determinants. her Exist Exist Relationship between Imaginary Space. There Exist Relationship. We Dicuss a Formula In This Paper.

Heading1.2:
We Drive a General Solution.. We Get General Solution. There Exist General Solution Between Them.

Heading2.1:
We Discuss Relationship Between Determinants, We Also Discuss Relationship Between Functions.

Heading2.2:
We Also Discuss Ratio in This Paper. We Also Discuss relationship Between Imaginary Numbers.
Exist Ratio Between Numbers.

$$\frac{102102102102\ldots\ldots\ldots\ldots}{101101101101\ldots\ldots\ldots\ldots\ldots} = 1.0099\text{Bar}$$

$$\text{Prove That: } \frac{x+y+z}{x^2+y^2+z^2} = 3$$

$$x^2+y^2+z^2$$

These are $x \cdot x + y \cdot y + z \cdot z$ Implies to 6

$$x+y+z$$

These Implies to 3
6-3=3 ……..(1)
4+4+4+4-6=12-6=6 ……(2)
Substract (1) From (2)
6-3=3

Relationship Between Equation .
Consider a Equation.
$\frac{1}{x^2y^2}=\frac{1+z}{x+z}$
Atx=1,y=1,z=2
$\frac{1}{1^1\cdot 1^1}=\frac{2}{1+2}=\frac{1}{1}=\frac{2}{3}$=2=3. Therefore 3-2=1,2-3=-1

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.802 | A Monthly Double-Blind Peer Reviewed Journal |

| Volume 11, Issue 10, October 2024 |

$\frac{1}{x^2y^2}-\frac{z}{x+z}$=-1,1
Atx=1,y=1,z=2
$\frac{1}{x^2y^2}=\frac{1+z}{x+z}$
Cross Multiple The Equation We Get.

$$z = x^2y^2(1+z)$$
$$x + z - x^2y^2 - x^2y^2z = 2 - 1 \cdot 1 - 1 \cdot 1 \cdot 2 = -1$$

We Solve The Equation We Get The Realtionship -1,-1,1 This Equation Have Three Different Values -1,-1,1

Limit Case.
$\frac{1}{x^2}+\frac{1}{x}+\frac{1}{y^2}+\frac{1}{y}$

We calculate The Four terms of a Series.=4……(1)

$\lim_{x \text{ approch to } 0} \frac{1}{x}(\frac{1}{x}+1)+\lim_{y \text{ approch to } 0} \frac{1}{y}(\frac{1}{y}+1)$
$\lim_{x \text{ approch to } 0} \frac{1}{x}(\frac{1}{0}+1)+ \lim_{y \text{ approch to } 0} \frac{1}{y}(\frac{1}{0}+1)$
Taking x and y Separate We get.
$\frac{1}{x}+\frac{1}{y}$=taking x=1,y=2
X=2,y=3
X=3,y=4
……
…….
……
$\frac{1}{2}+\frac{1}{3}=\frac{3+2}{6}=\frac{5}{6}$
Numertaor 5 –Iquation(1)=5-4=1

4,5 Sequence Wise.
This Resullt is True for
$\frac{1}{x^2}+\frac{1}{x}+\frac{1}{y^2}+\frac{1}{y}+\frac{1}{x^2}+\frac{1}{x}$=6, $\frac{1}{x^2}+\frac{1}{x}+\frac{1}{y^2}+\frac{1}{y}+\frac{1}{x^2}+\frac{1}{x}+\frac{1}{y^2}+\frac{1}{y}$=8,10,112,14,……..

Formula:

$$x^2+\frac{a+b+1}{a+b-2}=\frac{a+b}{b} \; at \; x = 2,3$$
$$is \; equal \; to$$
$$\frac{i}{3}$$

Exapmle1:

$$x^2+\frac{2+3+1}{2+3-2}=\frac{2+3}{3}$$
$$x^2+\frac{6}{3}=\frac{5}{3}$$
$$x^2=\frac{5}{3}-\frac{6}{3}=-\frac{1}{3}$$
$$x=\sqrt{-\frac{1}{3}}=\frac{i}{3}$$

Relationship Exist That:

$$x^2, x^3, x^4$$

We Incerese Numbers That:
We Multiple Number
$2 \cdot 3 = 6, 3 \cdot 4 = 12, 4 \cdot 5 = 20$

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.802 | A Monthly Double-Blind Peer Reviewed Journal |

| Volume 11, Issue 10, October 2024 |

x^2 x^3 x^4
6 12 20=
1 1 1

$$x^2(12-20)-x^3(6-20)+x^4(12-20)=-x^2\cdot 8+x^3\cdot 14-x^4\cdot 8$$

(At x=1) $=-(1)^2\cdot 8+(1)^2\cdot(14)-(1)^4\cdot 8$
-8+14-8=-2

$$\boldsymbol{x^3, x^4, x^5}$$

We Multiple numbes
$3\cdot 4=12, 4\cdot 5=20, 5\cdot 6=30$

x^2 x^3 x^4
12 20 30=
1 1 1

$$x^3(20-30)-x^4(12-30)+x^5(20-30)=-x^2\cdot 10+x^3\cdot 14-x^4\cdot 10$$

$=-(1)^2\cdot 10+(1)^2\cdot(18)-(1)^4\cdot 10$=-10+18-10=-20+18=-2

We Incerease Number in Sequencence Wise Put Into a Matrix Then We Get The Result =-2 Which is General.
……..
……
……
…….
…….

Example1:

x^2, x^3, x^4
Taking Powers of x In Such a Way That:
Taking $2\cdot 3=6$
taking $3\cdot 4=12$
12-6=6
6-6=0

Example2:

x^4, x^5, x^6
Taking $4\cdot 5=20$
taking $5\cdot 6=30$
30-20=10
20-10=10
10-10=0
This relationship is applicable for X power even First.

…….
…….
……
……

Conflict of interest: No conflict of interest. Self Made Research Paper.

Funding:
No funding

Author and affiliations:
Harshvardhan, G.B. pant memorial Government College Rampur Shimla (India)

Contributions: Equations.

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.802 | A Monthly Double-Blind Peer Reviewed Journal |

| Volume 11, Issue 10, October 2024 |

Additional information:
Must working on numbers,Functions , Equations, Variables.

Abbreviations:
Concept of numbers
Concept Equations
Concept Of functions

Data availability statement: dnwxmbxywmdwwexm@gmail.com

II. CONCLUSION

Increase knowledge about Numbers. Sequences and their types. It Also Increase Knowledge about Pure Mathematics.

REFERENCES

[1] A., F., D., C.-u., & C.J., N. (Annales Acedemiae Scientiarum Fennicae Mathematica). THE MAXIMAL FUNCTIONON VARIABLES L^P SPACES. 28, 224-236.
[2] Harshvardhan. (2023).Numbers Polynomials and Variables .AJOM, 1-7.
[3] Sharma, D. (1985). Groups. In D. Sharma, ALGEBRA (FIRST EDITION ed., Vol. 1, pp. 1-426). N.D.118 , Tanda Road , Jalandhar: Sharma Publications.
[4] Sharma, D. (2017). REAL ANALYSIS (FIRST EDITION ed., Vol. 1). N.D. 118,Tanda Road,Jalandhar: Sharma Publications.
[5] Arnold, V. I. (1957-1965). Representations of functions celestial mechanics and KAM theory. : Springer.
[6] Jain, T. (2018-2019). Principals of Microeconimics First Year (Vol. 1). Ambala: VK Global PublicationsPvt.Ltd.
[7] Purohit, D. G. (2020). CSIR-NET/JRF Mathematics (Vol. 1). Invincible Publisher.
[8] Sharma, D. (1985). Differential Equations (Vol. First). Jalandhar: Sharma Publications.
[9] Sharma, D. (2017). INTEGRAL CALCULUS (Vol. 1). Tanda Road, Jalandhar: SHARMA PUBLICATIONS.
[10] Harshvardhan. (2023, August). Determinants and Nuclear Equations. IRJMETS, 4, 812-815.

Impact Factor: 7.580

INTERNATIONAL JOURNAL
OF MULTIDISCIPLINARY RESEARCH
IN SCIENCE, ENGINEERING, TECHNOLOGY AND MANAGEMENT

+91 99405 72462 +91 63819 07438 ijmrsetm@gmail.com