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Numbers and Determinants

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Numbers Play Important role in Applied and Pure Mathematics. Determinanats are Usefull in Pure Mathematics. In Mathematics There is a Lots Of Use Of Determinanat. There Exist Several Types Numbers. There are sevral types of numbers natural, numbers, prime numbers, rational and irratioanl etc. there are such books for applied mathematics integral calculus anddiffrential equations. Etc.we have no proof of these inequalities and formula given in above abstract. Another paper catain proof of these problems..we have simle explaination of these things. We Discuss Relationship Between Numbers. Relationship Between Prime Numbers. There are Many Unsolved Problems Based On Prime Numbers.

There exist several types of Relationship Between Determinanats. We Discuss Relationship Between

Exist General Formula in a Such a Way That

$$\begin{vmatrix} a & 0 & a \\ 0 & a+1 & 0 \\ a+2 & 0 & a+2 \end{vmatrix} = 0$$

Example1:

$$\begin{vmatrix} 1 & 0 & 1 \\ 0 & 2 & 0 \\ 3 & 0 & 3 \end{vmatrix} = 1((2\cdot 3 - 0\cdot 0)+1((0\cdot 0-2\cdot 3)=6-6=0$$

Example2:

$$\begin{vmatrix} 1 & 0 & 1 \\ 0 & 2 & 0 \\ 3 & 0 & 3 \end{vmatrix} = 1((2\cdot 3 - 0\cdot 0)+1((0\cdot 0-2\cdot 3)=6-6=0$$

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Another examples are true By aranging numbers of the form of above experession.

Exist relationship between Numbers:

$1^2 + 2^2=5=4+1$; $4 =4\cdot 1$

$2^2+3^2=4+9=13=12+1$; $12=4\cdot 3$

$3^2+4^2=25=24+1$; $24=4\cdot 6$

In Above 4 is conatant and series is 1,3,6,9,11,……..

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Exist relationship between determinants

$$\begin{vmatrix} a & a & a \\ a & 0 & a \\ a+1 & a+1 & a+1 \end{vmatrix} = 0$$

Example1:

$$\begin{matrix}1 & 1 & 1\\ 1 & 0 & 1\end{matrix}=1(0\cdot 2-2)-1(1\cdot 2-2\cdot 1)+1(2\cdot 1-2\cdot 0)=-2+2=0$$
$$\begin{matrix}2 & 2 & 2\end{matrix}$$

$$\begin{matrix}2 & 2 & 2\\ 2 & 0 & 2\end{matrix}=2(0\cdot 3-3\cdot 2)-2(2\cdot 3-3\cdot 2)+2(2\cdot 3-3\cdot 0)=-12+12=0$$
$$\begin{matrix}3 & 3 & 3\end{matrix}$$

Exist Relationship between numbers:

$\frac{1}{2}+\frac{2}{3}=\frac{3+4}{6}=\frac{7}{6}$

$\frac{1}{3}+\frac{3}{4}=\frac{4+9}{12}=\frac{13}{12}$

$\frac{1}{4}+\frac{4}{5}=\frac{5+16}{20}=\frac{21}{20}$

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General relationship

$\frac{1}{a}+\frac{(a)}{(a+2)}=\frac{(a+2)+a(a)}{a(a+2)}$

$=\frac{(a+2)+a^2)}{a(a+2)}=\frac{a+2+a^2}{a^2+2}$=at a=1 we get

$=\frac{1+2+1^2}{1^2+2}=\frac{1+2+1+1}{1+3}=\frac{4}{3}$; Numirator is Bigger then Denominator

Abbreviations:

Numbers

Determinants

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Contributions: Numbers and Determinants

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Must working on numbers, Two Functions And Variables.

Declarations

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