Group

(Abelian Group)

w.r.t

" Subtraction "

&

" Division "

By # Prof: Fazal Abbas Sajid

- Many Students consider that there is no group w.r.t (Subtraction and Division)
- Even that Google Search shows these wrong informations

Remember Dear Students :

- Set $\{0\}$ is abelian Group w.r.t " $-$ "
- Set $\{1\}$ is abelian Group w.r.t " $\div$ "

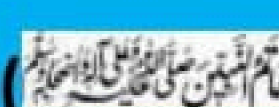
Google does not know these important informations

I say " Google koi hadees to nhi "

I also say "Google is just artificial Storage (USB) " ALLAH PAK ka ata kya gya Dimagh (Brain) to nhi

Google can show just that results only which are uploaded by any person on Google

- I am infinity times grateful to

ALLAH ALMIGHTY and MUHAMMAD ()

to become me 1st Person to introduce these important hidden informations 1st time in the World

Regards: Prof. Fazal Abbas Sajid

Proof of Group

(Abelian Group)

w.r.t

" Subtraction "

&

" Division "

By # Prof:Fazal Abbas Sajid

Alhamdulillah I am 1st Person in the World who introduced this concept 1st Time in the World

Abelian group w.r.t " Subtraction "

Let A = $\{0\}$

G1 # Clouser Law :

As $0 - 0 = 0 \in A$ hence Clouser Law hold

G2 # Associative Law :

$(0 - 0) - 0 = 0 - (0 - 0)$

Hence Associative Law hold

G3 # Existence of Identity Element :

" 0 " is subtractive identity and $0 \in A$,

s.t $0 - 0 = 0 = 0 - 0$

Hence subtractive identity exist in A

G4 # Existence of Inverse of Element :

" 0 " is subtractive inverse of itself ,

s.t $0 - 0 = 0 = 0 - 0$

Hence subtractive inverse of each exist in A

G5 # Commutative Law :

as $0 - 0 = 0 - 0$

Hence commutative law hold

G1 to G4 indicates Set A is group w.r.t " – "

G1 to G5 indicates Set A is abelian group w.r.t " – "

Abelian group w.r.t " Division "

Let B = {1}

G1 # Clouser Law :

As $1 \div 1 = 1 \in B$ hence Clouser Law hold

G2 # Associative Law :

$(1 \div 1) \div 1 = 1 \div (1 \div 1)$

Hence Associative Law hold

G3 # Existence of Identity Element :

" 1 " is divisive identity and $1 \in B$,

s.t $1 \div 1 = 1 = 1 \div 1$

Hence divisive identity exist in B

G4 # Existence of Inverse of Element :

" 1 " is divsive inverse of itself ,

s.t $1 \div 1 = 1 = 1 \div 1$

Hence subtractive inverse of each exist in B

G5 # Commutative Law :

as $1 \div 1 = 1 \div 1$

hence commutative law hold

G1 to G4 indicates Set B is group w.r.t " ÷ "

G1 to G5 indicates Set B is abelian group w.r.t " ÷ "