(noiszer per & noitatora) 2-tint

S Repealed ranks (Continued): If any two or more individuals are bracketed equal in any classification with respect to two characteristics A and B OH if there is more than one item with the same value in the service, the spearman's formula breaks down.

To corruct the errors in the formula, we give common ranks to the respected literus. This common rank is the average of the ranks which there literus would have assumed if they were slightly diff from each other.

The new f corrected formula for repeated ranks is $-\frac{6(2d^2+T_X+T_Y)}{n(n^2-1)}$

there, $T_X = \sum \frac{m(m^{-1})}{12}$, where m' is the not of times an item is repeating in X series

f $T_{\gamma} = \sum_{i=1}^{n} \frac{h(\hat{p}^{-i})}{12}$, where \hat{p} is the no. of himse an item is superated in γ - source.

a) Obtain the rank correlation co-effecient for the foll data:

X: 68 64 75 50 64 80 75 40 55 64

Y: 62 58 68 45 81 60 68 48 50 70

X	(\(\forall \)	Rank (x)	Rank(Y)	d=x-y	92	
68	62	4	5	~	1	
64	58	6	7	- (,	
75	68	2.5	3.5	- (1	
50	45	9	. 10	- 1	Ţ	
64	8 1	6	1	5	25	
ያስ	<i>(</i> ~	4 1	R	- T	25	

, ,	٠, ١			-			-T
64	8	6	8	1	5	25	
80	60	× 1		6	- 5	25	
75	6 8	2.5		3.5	-1	1	
90	48	10		9	1	1	
55	50	8		8	0	0	
64	70	6		2	4	16	
					24=0	5 12-70	

* The ranks (repeated) which are given to same items un a series are called tied ranks.

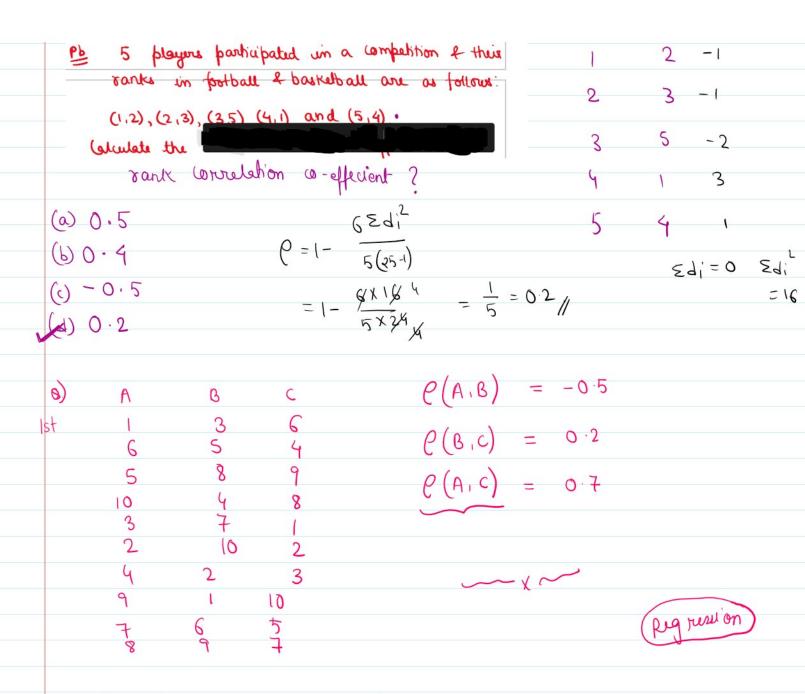
If the same item is at rank m, m+1, m+2, ..., m+r, then the common rank of all the same item is the average of m, (m+1), ..., (m+n)ie

m+(m+1)+(m+2)+...+(m+n)

(n+1)

Pb 5 players participated in a competition of their ranks in football & basketball are as follows:

1 5 -1 β 9! ε9!₅



§ Regnession - Stepping back towards the arrage.

Six Francis Galton