# 0320 Calculate Pairs Sub Row Formula

The \*pairs have some unique characteristics. Looking at a group (g) , any group and the rows or records within a group (g) reveals some additional math and symmetry.

There are four charts below. (g)0 , (g)1 , (g)2 , (g)3 ; each is offset from the other by plus thirty.

a) (g)0 starts at 0

b) (g)1 starts at 30

c) (g)2 starts at 60

d) (g)3 starts at 90

Within a group (g) there are eight rows (r) one for each \*fam formula. Then the solutions are placed under each \*pair. On the left side of the gray bar is sorting of the \*pairs by group (g) by row (r) by \*fam ( as PSleft and PSright ).

To the right of the grey bar all of group zero (g)0 and row one (r1) are sorted together. Then (g)0 (r2) and on. The \*pairs are sorted from low to high. Inside the cells with borders are the values. This will be the focus of the math going to the right.

The two values (PSleft & PSright) within a row all add to the same value. See the ‘sum’ column. The next column ‘sum / 30’ is the value of division. The next column ‘\*fam value’ is a guess of the \*fam. Take and subtract ‘\*fam value’ from ‘sum / 30’ to make the column ‘subtract \*fam value’. Divide that column by 30 to get the group (g).

Look at each of the next four charts.

This leads to the general equation of:

= ( { ( [ \*pair.PSleft + \*pair.PSright ] / 30 ) - \*famGuess } / 30 ) = group

Go back to the starting premise of \*wildcard ( \*1 , \*3 , \*7 , \*9 ) and \*fam (\*fam01 , \*fam 07 , . . . , \*fam29). Then to all the sorts and formulas to get to here. There is a symmetry and balance for the eight equations and formulas. But , no prime numbers can be easily decerned. We can see all numbers prime and non-prime. Yet a formula for primes is not clearly evident. The only common thread is thirty (30) ; and for each \*fam the next PS (prime suspect) appears to be thirty away.

All of these charts are large datasets of the prior chapter.

## (prg0)



## (prg1)



## (prg2)



## (prg3)



The \*pairs have some unique characteristics. Looking at a pgrX (\*pair / group (g) / row (r) / number ), any \*pair , group and the rows or records within a group (g) reveals some additional math and symmetry.

There are four charts below. (pgr0) , (pgr1) , (pgr2) , (pgr3) ; each is offset from the other by plus thirty. (pgrX) (\*pair group row number)

1. (pgr0) starts at 0
2. (pgr1) starts at 30
3. (pgr2) starts at 60
4. (pgr3) starts at 90

Within a (pgrX) there are four \*pairs and eight rows (r) one for each \*fam formula. Then the solutions are placed under each \*pair. On the left side of the gray bar is sorting of the \*pairs by \*fam ( as PSleft and PSright ). The third row ‘r3’ has been highlighted in each sheet to help focus on the data collection.

All the like rows are sorted together on the right side of the gray bar. All the \*pairs of row one (r1) are sorted together. Then (r2) are joined , and on. The \*pairs are sorted from low to high. Inside the cells with borders are the values. This will be the focus of the math going to the right.

The two values (PSleft & PSright) within a row all add to the same value. See the ‘PSsum’ column. The next column ‘PSsum / 30’ is the value of division. Then the column ‘\*fam value’ is the \*fam. Above in blue is the subtraction value. Take and subtract ‘\*fam value’ from ‘PSsum / 30’ to make the column ‘subtract \*fam value’. Divide that column by 30 to get the (pgrX).

Look at each of the next four charts. This leads to the general equation of:

= ( { ( [ \*pair.PSleft + \*pair.PSright ] / 30 ) - \*fam } / 30 ) = (pgrX)

Go back to the starting premise of \*wildcard ( \*1 , \*3 , \*7 , \*9 ) and \*fam (\*fam01 , \*fam 07 , . . . , \*fam29). Then to all the sorts and formulas to get to here. There is a symmetry and balance for the eight equations and formulas. But , no prime numbers can be easily decerned. We can see all numbers prime and non-prime. Yet a formula for primes is not clearly evident. The only common thread is thirty (30) ; and for each \*fam the next PS (prime suspect) appears to be thirty away.

Inside the file:

“Tio Cash Master 0320 Calculate Pairs Sub Row Formula”

each sheet has a testbed to the right to validate the data.

= ( { ( [ \*pair.PSleft + \*pair.PSright ] / 30 ) - \*famGuess } / 30 ) = group



Chapter Turning Point