<https://community.powerbi.com/t5/DAX-Commands-and-Tips/Trying-to-understand-usage-logic-of-SUMX-outcome-is-illogical/m-p/2030465>

‎08-22-2021 08:53 AM

[@JustinDoh1](https://community.powerbi.com/t5/user/viewprofilepage/user-id/296339) Sorry, I don't see SUMX in your formulas? Reasons to use SUMX. SUMX accepts a table expression as the first parameter so you can filter it however you please and then SUMX takes the second parameter, evaluates the expression for each row of the table and then sums the results together. You can see the difference between SUMX and CALCULATE. Take a simple table like below:

ItemQuantityValue

| One | 5 | 5 |
| --- | --- | --- |
| Two | 10 | 10 |
| Three | 20 | 20 |

And the following measures:

Sumx1 = SUMX(FILTER('Items',[Item]<>"Two"),[Quantity]\*[Value])

Caculate1 = CALCULATE(SUM('Items'[Quantity])\*SUM('Items'[Value]),'Items'[Item]<>"Two")

SUMX returns the correct answer 425 while CALCULATE returns the wrong answer 625. SUMX got the right answer because it evaluated at the row level, 5\*5 + 20\*20. CALCULATE got it wrong because it calculated (20 + 5) \* (20 + 5).

<https://community.powerbi.com/t5/DAX-Commands-and-Tips/Trying-to-understand-the-outcome-from-my-DAX-code-using-Min-amp/m-p/2022160>

Refused 0817 =

Sumx (SUMMARIZE( Table1, Table1[Consent], Table1[ConsentDate],"\_1",

CALCULATE( DISTINCTCOUNT( Table1[ClientID] ),

(

Table1[Consent] = "Refused" &&

Table1[step] = 1 // &&

//vImmunization < vConsent

)

))

, [\_1])

 first one is new column I am creating in temp table, Second I am using that column

Other HIV =

VAR \_\_table = SUMMARIZE(

            vw\_ods\_patient\_covid19\_immunizations,[ClientID],"\_\_value",

            [Other]

            )

return

if(

    hasonevalue(vw\_ods\_patient\_covid19\_immunizations[ClientID]),

    [Other],

    SUMX(\_\_table,[\_\_value])

)