

CREATING MEASURES IN DAX

BY

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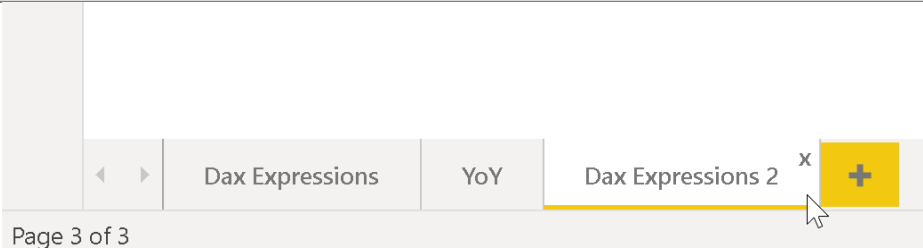
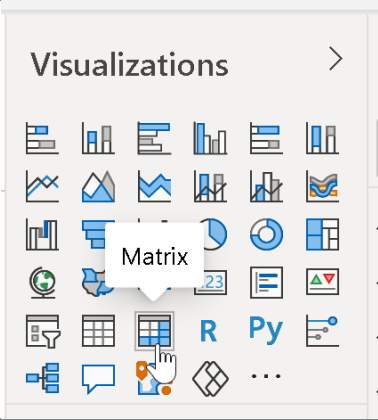
CREATING MEASURES IN DAX

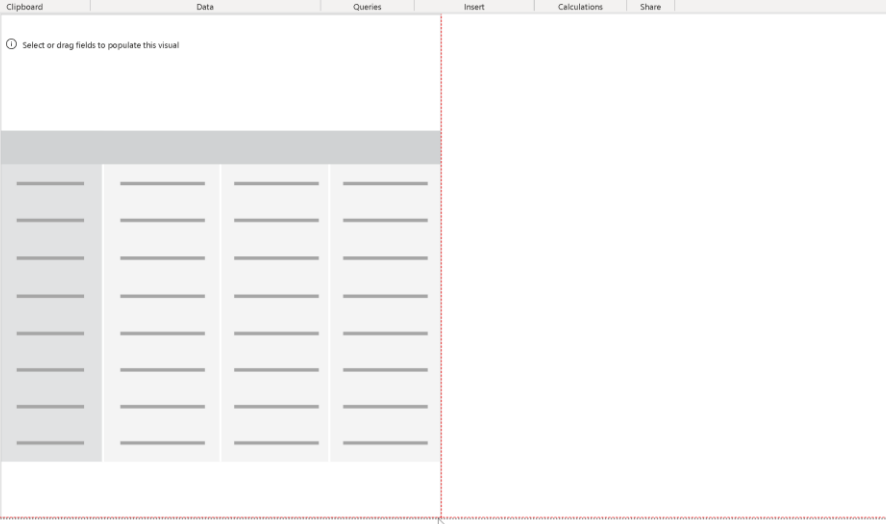
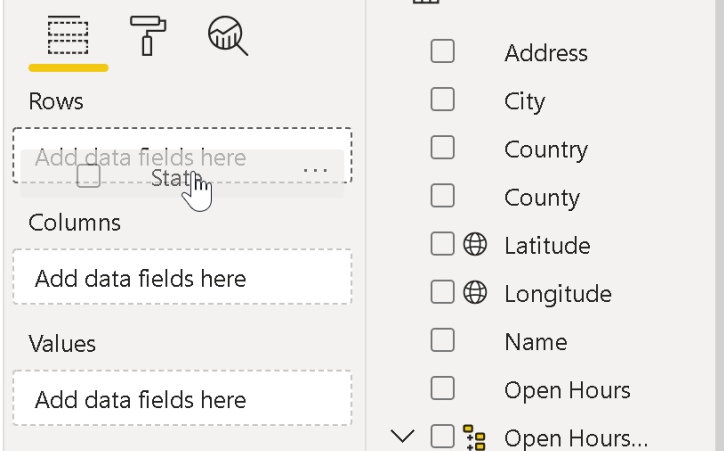
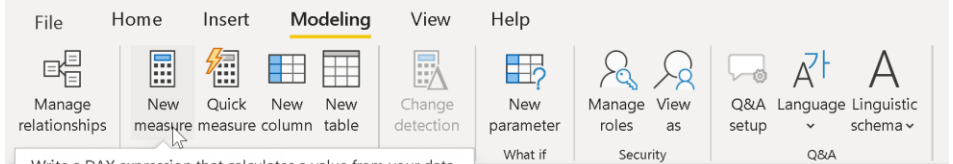
In this lab, you will learn how to create some common measures in DAX.

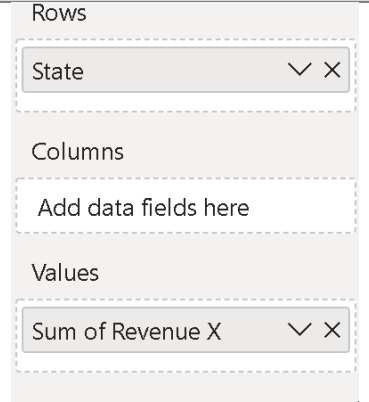

AT A GLANCE

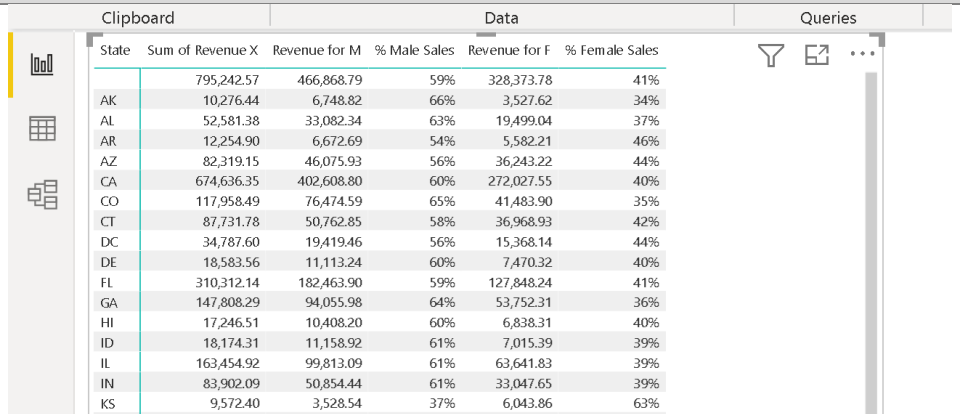
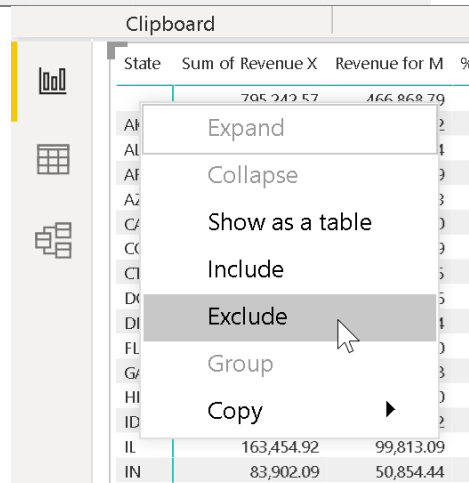
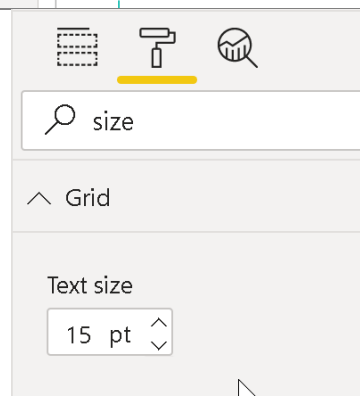
- ▶ Create a Measures Folder
- ▶ Use Matrix Visual and Bar Charts to create a Dashboard
- ▶ Use Report View to preview the results

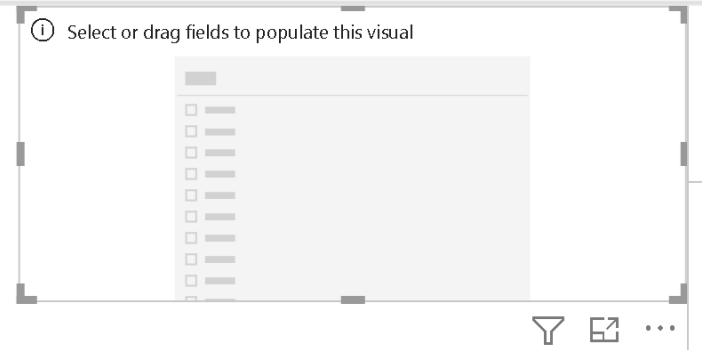

STEP-BY-STEP INSTRUCTIONS

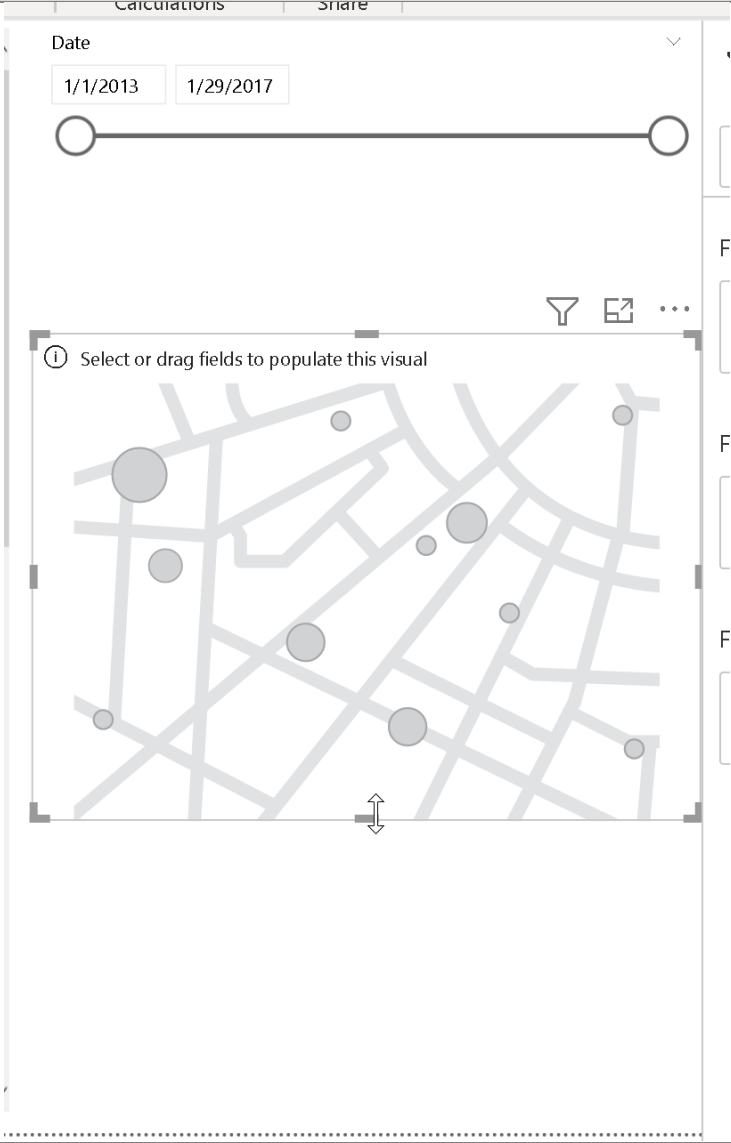
Click Steps	Screen Shots
<div>1. Go into Module 2 and open Sales Dashboard.pbix.</div> <div>2. Once open, click on the Report view and create a new tab.</div> <div>3. Name this tab "DAX Expressions 2"</div>	
<div>4. Insert a new Matrix visual. It should take up about half of the screen.</div>	

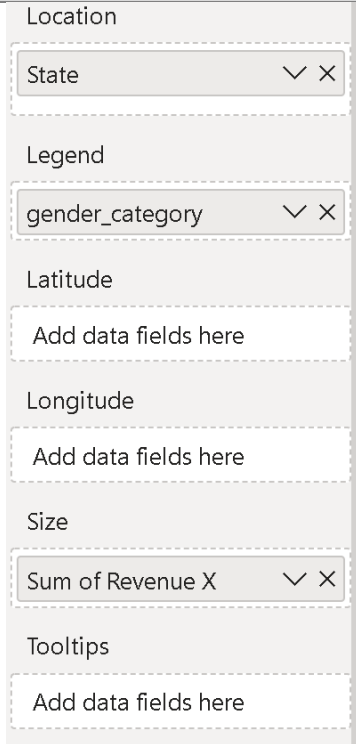


Click Steps	Screen Shots
<p>5. Resize until half of the visual takes up the canvas.</p>	
<p>6. In the new matrix, drop Stores > State into the Rows field.</p>	
<p>7. From on the modeling Ribbon, click New Measure.</p>	

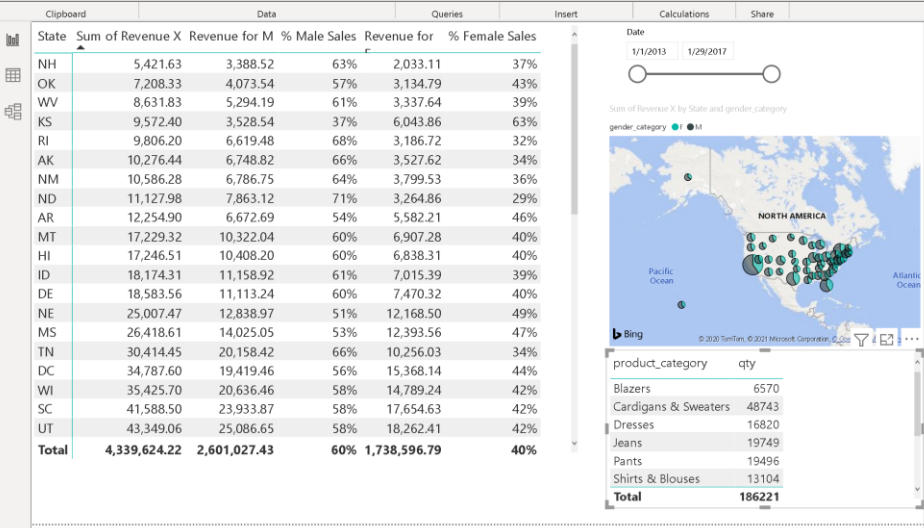
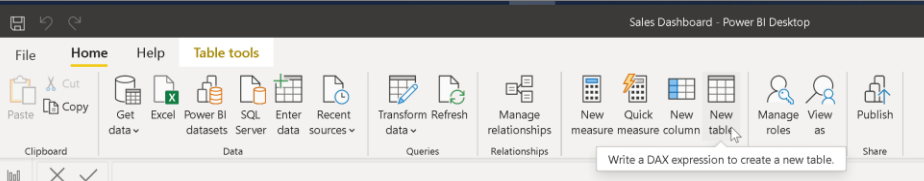
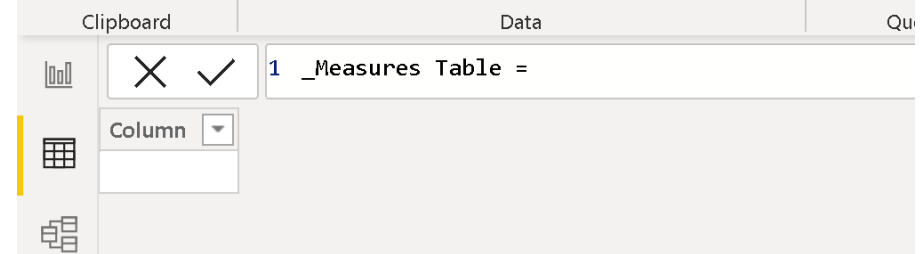
Click Steps	Screen Shots
<p>8. Paste the following into the new measure.</p> <p>Sum of Revenue X = Sumx(transactions, transactions[qty] * RELATED(products[msrp]))</p> <p>9. Once created, add the new measure to the matrix.</p>	
<p>10. Follow steps 8 and 9 to add the following additional measures.</p> <p>Revenue for M = CALCULATE([Sum of Revenue X], filter('product category', 'product category'[gender_category] = "M"))</p> <p>Revenue for F = CALCULATE([Sum of Revenue X], filter('product category', 'product category'[gender_category] = "F"))</p> <p>% Male Sales = [Revenue for M]/[Sum of Revenue X]</p> <p>% Female Sales = [Revenue for F]/[Sum of Revenue X]</p> <p>11. Then add each successive new measure to the matrix following the screenshot to the right.</p>	

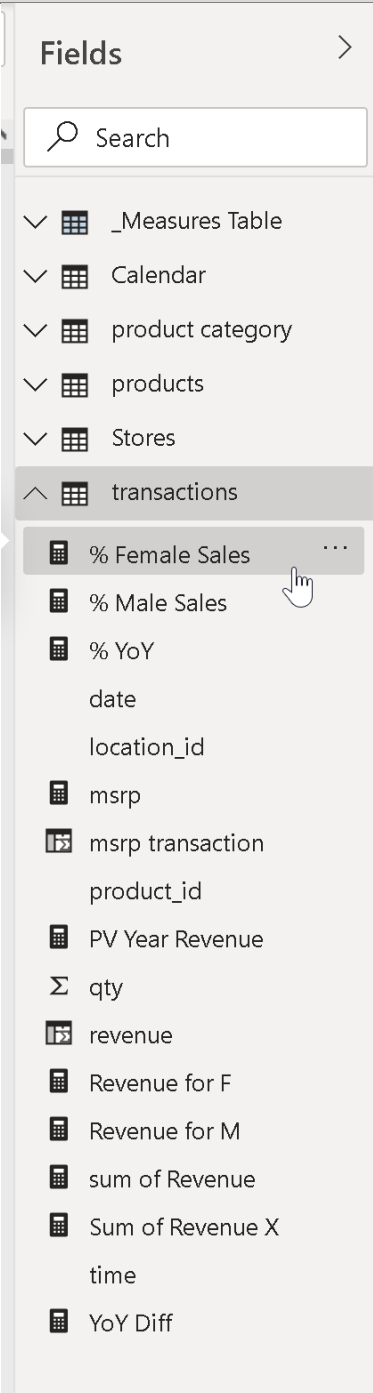
Click Steps	Screen Shots
12. Once complete, your screen should look similar to the one presented in the screen shot.	
13. Let's fix this table up. First, right click into the blank State and select exclude.	
14. Next, with the matrix still selected, click the Format paintbrush to open the formatting settings. 15. Type size into the search bar. 16. When you see Grid Size, set it to 15.	

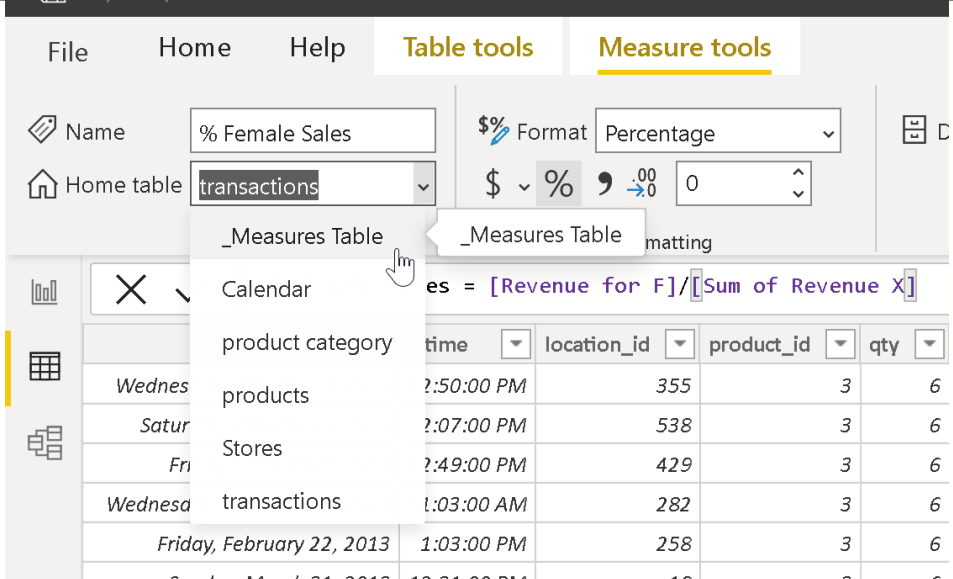
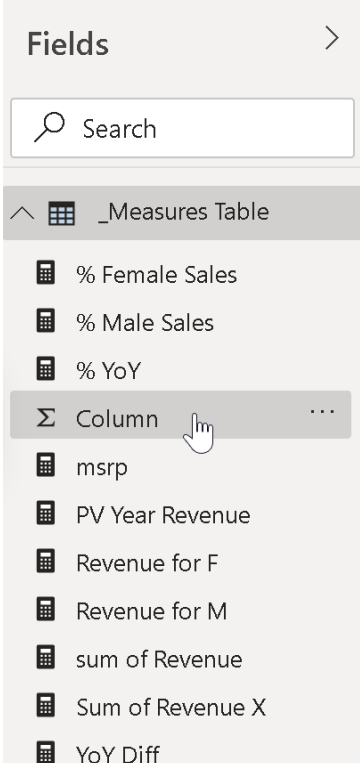
Click Steps	Screen Shots
<p>17. From the Visuals pane, drop a slicer at the top one third of the right side of the canvas (where there is still free space).</p>	
<p>18. Drop the Calendar > Date into the slicer.</p>	

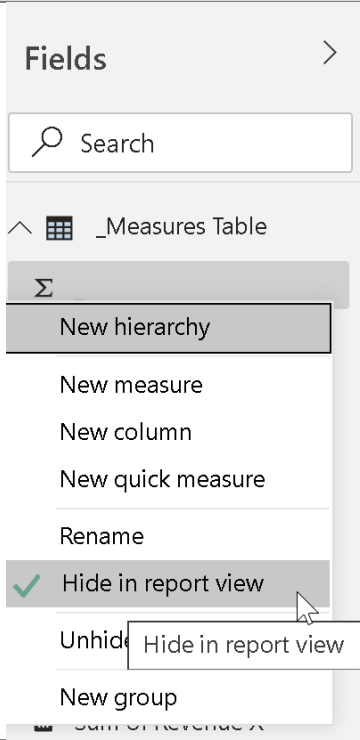
Click Steps	Screen Shots
<p>19. Drop a map visual directly under the slicer.</p> <p>20. Resize so there is a little space below it.</p>	 <p>The screenshot shows a Power BI interface. At the top, there are tabs for 'Calculations' and 'Share'. Below these is a 'Date' slicer with two date buttons: '1/1/2013' and '1/29/2017'. A horizontal timeline slider is positioned below the buttons. Under the slicer, a map visual is displayed, showing a network of gray lines representing roads or paths. Several gray circles of varying sizes are scattered across the map, representing data points. A tooltip is visible over one of the larger circles, displaying a question mark icon and the text 'Select or drag fields to populate this visual'. To the right of the map, there are three vertical brackets, each labeled with the letter 'F'. A double-headed vertical arrow is located at the bottom center of the map visual, indicating a resize handle.</p>

Click Steps	Screen Shots
<p>21. Drop Stores > State into the location field well.</p> <p>22. Next, drop product category > gender_category into the Legend.</p> <p>23. Next, drop transactions > Sum of Revenue X into the size.</p>	
<p>24. The map will now show little mini pie charts. (Not the best visual, but just wanted to give you an idea of what can be done)</p>	
<p>25. Now, drop a table visual underneath the map visual.</p> <p>26. In the values field well, drop product_category > product_category and transactions > qty</p>	

Click Steps	Screen Shots
27. You should now have a dashboard that looks like the screen shot.	 <p>The screenshot shows a Power BI dashboard with three main components:</p> <ul style="list-style-type: none"> Table: A table showing sales data by state, categorized by gender (Male and Female). The columns are: State, Sum of Revenue X, Revenue for M, % Male Sales, Revenue for F, and % Female Sales. The data is sorted by total revenue in descending order. Map: A map of North America showing the location of each state, with markers indicating the percentage of sales for each gender. Table: A table showing the quantity of each product category. The columns are: product_category and qty. The categories are: Blazers, Cardigans & Sweaters, Dresses, Jeans, Pants, Shirts & Blouses, and Total.
28. Let's organize your measures. 29. Click into the Data view and select New Table from on the Home menu ribbon tab.	 <p>The screenshot shows the Power BI Desktop ribbon with the 'Table tools' tab selected. The ribbon includes options for 'New measure', 'Quick measure', 'New table', and 'Manage roles'.</p>
30. Replace the left side of the equals with _Measures Table.	 <p>The screenshot shows the Power BI Desktop ribbon with the 'Table tools' tab selected. The 'New table' button is highlighted, and a tooltip is visible that says 'Write a DAX expression to create a new table.'</p>

Click Steps	Screen Shots
<p>31. Now look for each measure in your field list. Click on the desired measured. Note I am click on % Female Sales.</p> <p>You should know however that measures are easy to place into any table.</p> <p>Don't assume all your measures are in one table as I have in my example.</p>	

Click Steps	Screen Shots
<p>32. Once selected, go to the ribbon tab. In the Home table dropdown select _Measures Table.</p> <p>33. Do this for all outstanding measures.</p>	
<p>34. Once complete, click on the column named Column.</p>	

Click Steps	Screen Shots
<p>35. Rename it to “_”</p> <p>36. Then click on the three dots. Select “Hide in Report View”</p>	
<p>37. When you go back to Report view, you'll see all of your measures are organized!</p>	