**Assignment 7:**

**Iterator ("X") Functions**

Using the **FoodMart\_Data\_Model**workbook, complete the following steps

**1)** Use **SUMX** and **RELATED** to calculate a new measure named **[Total Cost]**, equal to *quantity* from the **Transactions** table multiplied by *product\_cost* from the **Product\_Lookup** table. Format as **currency**, rounded to the nearest dollar.

* In a new tab, create a  PivotTable to show **[Total Cost]**by *product\_brand*. What was the total cost of Tri-State products sold?

**2)** Create a new measure named **[Profit]**, equal to **[Total Revenue (Measure)]** minus **[Total Cost]**. Format as currency and round to the nearest dollar.

* Update your PivotTable view to show **[Profit]**by *sales\_district* from the **Region\_Lookup** table, then sort *sales\_district* descending by Profit. Which district saw the highest total profit? The lowest?

**3)** Use **RANKX** to calculate the rank of each product brand, by profit (**[Product Brand Rank (by Profit)]**) (***Hint:****you will need to specifically reference the product\_brand column in the****ALL****function*)

* Update your PivotTable view to show **[Product Brand Rank (by Profit)]** with *product\_brand* on rows, sorted ascending by rank. Which brand drove the most overall profit? Which is ranked #25?

**ANSWERS:**

**1)** SUMX(Transactions,Transactions[quantity]\*RELATED(Product\_Lookup[product\_cost]))

**1b)** ***$20,283***

**2)** [Total Revenue (Measure)]-[Total Cost]

**2b)** ***Los Angeles****($124,978),****Guadalajara****($2,936)*

**3)** RANKX(ALL(Product\_Lookup[product\_brand]),[Profit])

**3b)** ***Hermanos****($33,167),****Bravo****($16,322)*