Good Morning,

This project was designed to determine the amounts and causes of the returns at Superstore. Using Tableau to visualize it, I wanted to find the return rates and if they were influenced by season, product and even the discounts applied.

The dataset used was Tableau's Superstore dataset contains varying types of data such as the geographical data, date and time, numerical data for costs and profits, along with customers names and ID's.

Throughout the data we have a few interesting finds, beginning with the geographical data. Pulling the return rates using the total sales and returns we can see that through the country the returns are equal in percentage to one another, which shows that the returns are not due to something like trends or weather.

Next we used a scatterplot to confirm if there was a correlation of sales to returns. The scatter plot has a slight verticality to it along with a few outliers. Sales do not seem to have much of an influence on returns outside of the obvious, where higher sales would see an equally rising ratio of returns. Although the outliers may need to be looked into, as those products may be seeing decreased customer satisfaction.

Moving forward checking the return rates by the season showed that there were more returns done in the fall and winter months. With the fall being the highest by a wide margin. This could show several conclusions but I think it points back to the fall being a time where families move and school starts for many. I believe this shows in high purchase/returns in items such as tables, binders, supplies and other machines. And the high return rates could be due to space constraints, or some classes having color constraints that weren't brought to light beforehand and them needing to be returned and exchanged. This is also reinforced, I believe, through the Return Rate and Discounts table, which shows a higher rate of return in those items while they also have some of the highest discounts, although it could be prudent to see the discounts by season as well.

In conclusion, the analysis of return rates at Superstore revealed several key insights. Geographical data indicated that return rates are consistent across regions, suggesting that external factors like trends or weather do not significantly influence returns. A scatterplot analysis showed a slight correlation between sales and returns, with notable outliers that may warrant further investigation into customer satisfaction. Seasonal trends highlighted a significant increase in returns during the fall, likely linked to back-to-school purchases and related space constraints. Additionally, a higher return rate was observed in items with greater discounts, indicating a potential connection between pricing strategies and return behaviors. Overall, these findings underscore the

importance of examining product-specific factors, seasonal influences, and discount strategies to better understand and mitigate return rates at Superstore.