## Sample Applied Question for Exam 2

Use the "Ford for Sample Exam 2.xlsx" workbook data to answer the following questions:

1. (15 points) Assume that you have decided to use the last 10 years' worth of full financial statements (i.e., ending with Dec 2024) to forecast your sales for the next 10 years and you are going to use FORECAST.ETS() on "real" historic revenues (converted to 2024 dollars using the CPI numbers in the CPIAUCNS tab) to produce your forecasts. What will be your forecast sales number for 2033?

2. (15 points) Assume that you get the results shown on tab "Forecasts" from question 1 (you shouldn't, but assume you do anyways). Compute historic operating costs for Ford as (Cost of Goods Sold + Selling, General and Administrative Expense + Research and Development Expense - D&A), then convert these to 2024 values using the CPI numbers on the "CPIAUCNS" tab. Regress these historic real costs against historic sales using linear regression as we did in class for Target, and use the "Forecasts" values to estimate future costs. What will be your forecast operating cost for 2030?

3. (15 points) Assume that you have changed your mind and decided to use just the last 4 years of full financial statements to forecast your sales for the next 10 years and you are going to use FORECAST.ETS() to produce your forecasts. What will be your forecast sales number for 2033?