**Learning Objective: Understand three valuation models: Free cash flow to the firm (FCFF), free cash flow to equity, and Adjusted present value (APV). Use an input sheet for assumptions such that any assumption changes “flow through” the spreadsheet. Use Excel formulas to create a model which can value “infinite” cash flows (such as the valuation of a firm) and finite cash flows (such as the valuation of a capital budgeting project).**

**Instructions for completion:**

Please use the Excel File named “Valuation\_Models\_Cap\_Budgeting\_Student\_Version (Template for Case 1).xlsm” to complete the valuation models.

**PLEASE ONLY USE THE FILE THAT IS LISTED IN THE CASE/ASSIGNMENT SECTION OF CANVAS. Do not use the file with the same name in the Excel Files folder!**

Three worksheets are in this file: The information sheet, an Input sheet (named “Val Input”, and a sheet named “Valuation FCFF and FCFE and APV.” You may change the numbers in the Input sheet as you test your model, but upon completion, please change back to the original inputs.

On the information sheet, for “GROUP” please write out your group number (Groups are posted on Canvas). Do not write a digit, but rather a word. Example “One”, “Two”, etc. For the GTID, PLEASE DO NOT USE YOUR GTID NUMBER, but rather your GT USERNAME. Mine would be **jgarner47**. The NUMBER should not be shared!!!

**For cases, only one person per group will submit! Please name the file upon completion:**

**Case\_1\_Group\_number.xlsm (if you are group 3, your file would be named**

**Case\_1\_Group\_3.xlsm**

Your task in this is to replicate the models shown in the week 6 videos**. It is very important to follow the order shown in the videos.**

As with other assignments, anything in gray needs a formula. The gray cells are only in the sheet named “Valuation FCFF and FCFE and APV.” Very important: This “model” will achieve a valuation of a firm (assuming infinite cash flows) as well as the valuation of a finite capital budgeting project. Many of your formulas must be “driven” off Cell C2 in the Val Input sheet.

You may ignore the graphs on the “Val Input” sheet (nothing required) as well as the two (2) tables, one beginning at Cell A40 and the other at Cell I12. These will be used later to follow along a later video!

Your formulas for depreciation expense (which is in the “Valuation FCFF and FCFE and APV” worksheet) should cover all lives in the depreciation table shown in the “Val Input” sheet, so up to 10-year property. All examples are not shown in the video, but your formulas should cover all scenarios!

Three important items:

1. In the template file in the “Val Input” worksheet, there is “Sales Price of Project” in Row 26. This was added AFTER the video was done (so it’s not in the videos). Therefore, the MACRS table which is also in “Val Input” is shifted down an extra row. This matters when you write your formulas for Depreciation Expense (which will be done in the “Valuation FCFF FCFE and APV” worksheet.
2. Please use a Tax rate of 25% (rather than 40%). The new tax law changed the federal corporate tax rate to 21% so we use 25% to include other taxes (obviously that will change state by state, but it’s just an approximation). You will change Cell C12 in the “Val Input” worksheet. When you turn your file in, you should have 25%.
3. You can make any input BLUE and any formula in BLACK FONT even if it is pulling from another sheet (that is, you can for this case avoid "Green" font).

I have posted “numbers only” solutions files which go along with the videos (using tax rate of 40%) and a “numbers only” solutions file using 25%. **You may want to get your file “working” first by using 40% because that corresponds with the videos. Then all you will have to do is change Cell C12 in the “Val Input” sheet.**

Some cells which need formulas should return a label such as Cell B14 in the Valuation FCFF and FCFE and APV worksheet. These labels will be “blank” under certain conditions and will populate under other conditions.

**REMINDERS:**

Remember to fill out the information worksheet!

Remember to name your file as indicated above!

**END OF INSTRUCTIONS**