**Buff and Tuff Gym**

**Project Description:**

*In this project, you will create a worksheet that calculates membership costs for Buff and Tuff Gym. You will create functions that determine costs based on a condition, lookup membership rates and fees, and calculate monthly payments. You will also create functions that summarize your data.*

**Instructions:**

For the purpose of grading the project you are required to perform the following tasks:

| **Step** | **Instructions** | **Points Possible** |
| --- | --- | --- |
| 1 | Start Excel. Open the downloaded Excel workbook named *Exploring\_e02\_Grader\_EOC.xlsx*. | 0 |
| 2 | In the Circular Referencing Warning message box, click OK, and then close the Help window that opens automatically. Assign the name **Membership** to the range A18:C20. | 5 |
| 3 | In cell B2, enter a function that will return the value of today's date. | 4 |
| 4 | In cell C5, create a VLOOKUP function that returns the membership cost that corresponds with the membership type entered in cell B5. The function will look for an exact match in the range named **Membership**, and return the membership cost from the second column. | 10 |
| 5 | Copy the VLOOKUP function down to cells C6:C13. | 3 |
| 6 | In cell E5, enter an IF function that will calculate the annual total. If the client has a Locker (D5) is "Yes", then add the Cost (C5) to the Locker Fee (B22). Otherwise, the function will return the Cost only. Ensure that B22 is entered as an absolute reference. | 10 |
| 7 | Copy the IF function down to cells E6:E13. | 3 |
| 8 | In cell G5, enter a formula that will multiply the Annual Total (E5) **by** Years (F5) to calculate Total Due. Copy the formula down to cells G6:G13. For marking purposes make sure the formula order is Annual Total x Years, not Years x Annual Total. | 7 |
| 9 | In Cell H5, create a VLOOKUP function that returns the down payment that corresponds with the membership type entered in cell B5. The function will look for an exact match in the range named **Membership**, and return the down payment from the third column. | 10 |
| 10 | Copy the VLOOKUP function down to cells H6:H13. | 3 |
| 11 | The formula in cell I5 is incorrect, and contains a circular reference. Edit the formula so that is calculates the difference between Total Due and Down Payment. Copy the formula down to cells I6:I13. | 7 |
| 12 | In cell J5, enter a function to calculate a monthly payment for the client. The function will refer to the annual interest rate (B23) divided by B24, a loan term (F5) multiplied **by** B24, and the balance due (I5). Refer to B23 and B24 as absolute cell references. Refer to I5 as a negative value (-I5) so that your result returns a positive number. | 10 |
| 13 | Copy the payment function down to cells J6:J13. | 4 |
| 14 | In cell H18, enter a function that counts the number of entries in the range A5:A13. | 4 |
| 15 | In cell H19, enter a function that finds the lowest value in the range J5:J13. | 4 |
| 16 | In cell H20, enter a function that finds the average value in the range J5:J13. | 4 |
| 17 | In cell H21, enter a function that finds the highest value in the range J5:J13. | 4 |
| 18 | In cell H22, enter a function that finds the median value in the range J5:J13. | 4 |
| 19 | Format the range H19:H22 with the Accounting format. | 4 |
| 20 | Save the workbook. Close the workbook and then exit Excel. Submit the workbook as directed. | 0 |
|  | **Total Points** | **100** |