

# Apply Your Knowledge

Students will be able to construct formulas, understand and apply MIN, MAX, and AVG functions, identify and apply conditional formatting and produce a print ready worksheet using various print settings/options.

**Note:** To complete this assignment, you will be required to use a Data File, which is located on the website.

**Instructions:** Run Excel. Open the workbook Proximity Bus data file.

You will enter and copy formulas and functions and apply formatting to the worksheet in order to analyze the costs associated with a bus company's fleet of vehicles, as shown in Figure 2–70.

Figure 2–70

	A	B	C	D	E	F	G
1	Proximity Bus Service						
2	Vehicle Cost Analysis						
3	Bus ID	Cost per Mile	Miles Driven	Maintenance Cost	Mileage Cost	Total Cost	Total Cost per Mile
4	701	\$ 2.01	19,964	\$ 283.22	\$ 40,127.64	\$ 40,410.86	\$ 2.02
5	702	1.88	16,660	393.80	31,320.80	31,714.60	1.90
6	703	1.87	14,949	323.20	27,954.63	28,277.83	1.89
7	704	1.91	14,905	476.61	28,468.55	28,945.16	1.94
8	705	1.70	11,242	232.79	19,111.40	19,344.19	1.72
9	706	1.65	14,662	497.23	24,192.30	24,689.53	1.68
10	707	1.79	16,061	275.32	28,749.19	29,024.51	1.81
11	708	1.88	14,777	281.62	27,780.76	28,062.38	1.90
12	709	1.69	18,484	465.94	31,237.96	31,703.90	1.72
13	<b>Totals</b>		<b>141,704</b>	<b>\$ 3,229.73</b>	<b>\$ 258,943.23</b>	<b>\$ 262,172.96</b>	<b>\$ 1.85</b>
14	<b>Average</b>			358.8588889	28771.47	29130.32889	1.843049842
15	<b>Highest</b>			497.23	40127.64	40410.86	2.024186536
16	<b>Lowest</b>			232.79	19111.4	19344.19	1.683912836
17							

Vehicle Cost Analysis | Sheet2 | Sheet3

No Formulas/  
Functions will  
result in a zero  
grade.

## Perform the following tasks:

1. Use the following formulas in cells E4, F4, and G4:  
Mileage Cost (cell E4) = Cost per Mile \* Miles Driven or = B4 \* C4  
Total Cost (cell F4) = Maintenance Cost + Mileage Cost or = D4 + E4  
Total Cost per Mile (cell G4) = Total Cost / Miles Driven or = F4 / C4
2. Use the fill handle to copy the three formulas in the range E4:G4 to the range E5:G12.
3. Determine totals for the miles driven, maintenance cost, mileage cost, and total cost in row 13. Copy the formula in cell G12 to G13 to assign the formula in cell G12 to G13 in the total line. If necessary, reapply the Total cell style to cell G13.
4. In the range D14:D16, determine the average value, highest value, and lowest value, respectively, for the values in the range D4:D12.
5. Use the fill handle to copy the three functions to the range E14:G16.
6. Format the worksheet as follows:  
Change the workbook theme to Vapor Trail by using the Themes button (Page Layout tab | Themes group)  
Cell A1 — change to Title cell style  
Cell A2 — change to a font size of 16  
Cells A1:A2 — Red, Accent 1, Lighter 60% fill color and thick black outside borders  
Cells B4, D4:G4, and D13:G13 — accounting number format with two decimal places and fixed dollar signs by using the 'Accounting Number Format' button (Home tab | Number group)  
Cells B5:B12, and D5:G12 — comma style format with two decimal places by using the Comma Style button (Home tab | Number group)  
Cells C4:C13 — comma style format with no decimal places.  
Cells G4:G12 — apply conditional formatting so that cells with a value greater than 1.85 appear with a red background color and white font  
Compare the formatting for the range D14:G16 with Figure 2–70. Adjust decimal places as needed.
7. Best fit columns to display all data.
8. Use Range Finder to verify the formula in cell G13 is correct. =F13/C13
9. Create a header/footer as listed below:  
**Center Section:** Enter your First Name and Last Name along with your Period #.  
**Left Section:** Sheet Name element **Right Section:** Current Date element  
**Footer Center Section:** File name element
10. Save the workbook using the file name, **LastName Proximity Bus.**
11. Preview and print the entire worksheet in landscape orientation and fit on 1 page.

12. Press CTRL + ( ` ) to change the display from the values version to the formulas version view.  
Print the range A3:D16 in formula view using landscape orientation and fit on 1 page.
13. Print the entire worksheet in formula view, landscape orientation and fit on 1 page.
14. Press CTRL + ( ` ) to change the display of the worksheet back to the values version view.
15. Close the workbook with saving it.
16. Save printouts until you rubric. Drop your file and attach the printouts to your rubric.