 Microsoft Office Excel 2013

Lesson 2

Math Formulas

1. Open the Excel 2 Starter.
   1. Save the document with Excel 2 and your initials.
   2. Enter your name and period where indicated. You do not need to add a header.

SCENARIO 1: Basic Math Formulas

1. Adding: Click on the Scenario 1 tab.

IN THIS LESSON

* Use formulas to add
* Use formulas to subtract
* Use formulas to multiply
* Use formulas to divide
* Formatting currency & percentages
* Autofill
* Write formulas with multiple equations
* Use formulas to solve basic and common scenarios.
  1. In D6, enter the formula to add cell B6 to cell C6. Do the same for all the other adding cells.

1. Subtracting:
   1. In D12, enter the formula to subtract C12 from B12. Do the same for all the other subtracting cells.
2. Multiply:
   1. In D18, enter the formula to multiply B18 with C18. Remember to use the \* key as your operator.
   2. Do the same for all the multiply cells.
3. Divide:
   1. In D24, enter the formula to divide B24 by C24. Do the same for all the divide tabs.
4. Add totals together:
   1. In D10, add each answer together by entering =D6+D7+D8+D9. Do this in ALL sections. If you have the correct answer, it will turn orange and automatically give you a point on your score sheet. You should now have 4 points.

SCENARIO 2: Checkbook

1. Click on the Scenario 1 tab.
   1. Change the formatting in columns D-F to currency.
   2. In F4, calculate how much would be in your bank account after purchasing the item for $15.69.
   3. Continue on for each transaction—subtracting all debits and adding all credits as needed.
   4. In F18 you should have a final balance. If it turns orange, it is correct. If not, check your math!
   5. You should now have three points on the score sheet for this section.

SCENARIO 3: Find the Discount

1. 3A:
   1. In C4, use the proper formula to find the discount. How much is 25% of $4.99?
   2. In D4, use the proper formula to **subtract** the discount from the retail cost.
2. Autofill
   1. Use autofill to repeat both formulas for the rest of the problems in 2A.
3. Cell Formatting: Currency
   1. Highlight C4:D13 and change the format to currency. Do the same for A4:A13.
4. 3B:
   1. In C18, use the proper formula to figure out the tax for each item. How much is a 6.75% tax on $9.99?
   2. In D18, use the proper formula by **adding** the tax amount to the retail cost.
   3. Use autofill on both columns to drag the formula down.
5. Cell Formatting: Percentages
   1. Highlight cells B18:B25 and change the formatting to a percent.
   2. Change the formatting of A18:A25 to currency.
   3. Change the formatting of D18:D25 to currency.
6. 3C:
   1. In C30, figure out the discount off the retail cost by using the percentage in column B.
   2. In E30, use ONE formula (using parenthesis) to figure out both the amount taxed and the new total with the tax **added**. It should look like this: =A30+(A30\*D30)-C30.
   3. Autofill your results down.
   4. Change the cell formatting for the percentages and currency as needed.
   5. Check your score sheet tab. You show now have 3 more points.

SCENARIO 4: Production & Profit

1. 1st Run:
   1. In **Profit margin, (D)**, use the correct formula to figure the profit margin—how much the company makes for each product they sell after subtracting the production cost. Autofill down for this an every column hereafter.
   2. In **Initial** **Profit (G)**, calculate how much money the company makes after they sell the amount in the first run.
   3. In **Units Remaining (H)**, calculate how many units are remaining after the first run sell (units sold)
   4. In **Site Commission 3% (I),** calculate 3% of the Initial profit, which is the commission the website charges to sell the item.
   5. In **Total Profit (J),** calculate the total profit after subtracting the commission.
      1. Re-format to currency or percentages where necessary.
      2. If J10 is orange, you have done the 1st run correctly.
2. 2nd Run:
   1. In **Sales Price (E),** calculate the sales price by taking the discount in column D from the original price. This will require TWO formulas in one cell—like in Scenario 2.
   2. In **Profit Margin (F)**, calculate the new profit margin with the sales price (instead of the original price) minus production cost.
   3. In **Customer Savings (G),** calculate how much the customer is saving—how much LESS they are paying with the discount.
   4. In **Initial Profit (H**), calculate how much money the company makes by multiplying the profit margin by the units sold.
   5. In **Units Remaining (I),** calculate how many units remain when subtracting the units sold from what is left after the first run (H4).
   6. In **Site Commission 3% (J),** calculate 3% of the initial profit.
   7. In **Total Profit (K)**, calculate the total profit after subtracting the commission.
      1. If L19 is orange, you have done the 2nd run correctly.
3. 3rd Run:
   1. In columns E-L, calculate the answers the same way as in the 2nd Run, taking into account the new amount remaining in inventory.
   2. In **Loss (M),** calculate the losses for the company—which is all the unsold inventory multiplied by the original production cost.
      1. If L28 and L29 are orange, you have done the 3rd run correctly.
4. If you have done all the calculations correctly, the answers should automatically transfer to K6:M6 and turn orange. You will also note that you have scored the final points on your score sheet.
   1. Remember—if even ONE calculation is incorrect, it can affect all of your calculations. If you have an error, check your calculations and fix them—it will fix all the others, too!
5. Print
   1. To print, ONLY print the SCORE SHEET! You DO NOT need to print the scenario sheets.