

## Excel O365 – Intermediate and Advanced Complex Formulae

Open the workbook **Inflation**.

1. In the cell **C4**, write a formula to calculate the impact of the salary increase percentage in the cell G2 on the salary figure in B4.  
**Try: Last Year Salary \* Salary Increase percentage**
2. In the cell **C5**, calculate the increase in the Investment for this year, if the investments grow at the rate of inflation specified in the cell G3.  
**Try: Investments \* Inflation percentage**
3. In the cell **D4**, write a formula to total **Last Year Salary (cell B4)** amount and the **This Year Increase (cell C4)** amount.
4. In the cell **D5**, write a formula to total **Last Year Investment (cell B5)** amount and **This Year Increase (cell C5)** amount.
5. In the cell **C9**, write a formula to multiple the **Mortgage** amount by the **Inflation** percentage. Copy this formula to all the other **Fixed Outgoings** cells C10:C16.  
**Note: Ensure cell G3 is absolute in the formula.**
6. In the cell **C20**, write a formula to multiply the **Food** outgoing amount by the **Inflation** percentage. Copy the formula to the other **Variable Outgoings** in the cells C21:C22.  
**Note: Ensure cell G3 is absolute in the formula.**
7. In the cell D9, write a formula to total **Last Year's Mortgage** amount and the **Mortgage Increase** amount. Copy the formula to the other **Fixed Outgoings** cells D10:D16.
8. In cell **D20**, write a formula to total **Last Year's Food** amount and the **Food Increase** amount. Copy the formula to the other **Variable Outgoings** cells D21:D22.
9. Make a note of the **Balance** in cell **C27**.  
Change the **salary increase** percentage in the cell **G2** to **3%**.  
Click into another cell and create a formula to work out how much the balance in cell C27 has increased.  
Make a note of the answer \_\_\_\_\_
10. Save and close the workbook.

## Excel O365 – Intermediate and Advanced Functions

Open the workbook **Function Exercise** and select the **Stats** sheet.

1. In the cell **E4**, click the **Autosum** button and use the **Sum** function to calculate the **Total Patient Admissions** using the figures in column B.
2. In the cell **E6**, click the **Autosum** button and use the **Average** function to calculate the **Average Admission Number** using the figures in column B.
3. In the cell **E8**, click the **Autosum** button and use the **Max** function to calculate the **Highest Admission** using the figures in column B.
4. In the cell **E10**, click the **Insert Function** button and use the **COUNTIF** function to find the number of Patient Admissions in column B with a value of 0.

*Clue*

**Range** B2:B31

**Criteria** 0

5. Save and close the workbook.

## Excel O365 – Intermediate and Advanced Logical Functions

Open the workbook **Exam Results for Comparison**.

1. Select the sheet called **First Aid**.
2. In the cell **E5**, click the **Insert Function** button and use the **IF** function to calculate if the **Mark** in cell **D5** is **greater than or equal to 70**.
3. Enter the text **Pass** if the **Value is True**.
4. Enter the text **Fail** if the **Value is False**.
5. Use the Autofill to copy the **IF** function entered in the cell **E5** to the remaining rows.
6. In the cell **F5**, click the **Insert Function** button and use the **IF** function to calculate if the **Result** in cell **D5** is **greater than or equal to 90**.
7. Enter the text **Winner** if the **Value is True**.
8. Enter the text **Lost** if the **Value is False**.
9. Use the Autofill to copy the **IF** function entered in the cell **F5** to the remaining rows.

Select the **Entitlement** sheet.

10. In the cell **F3**, use an **IF** function to calculate if the number of outstanding days in cell **E3** is **greater than 15**.
11. Enter the text **Send Email Warning** if the **Value is True**.
12. Enter the text **No Action Required**, if the **Value is False**.
13. Use the Autofill to copy the **IF** function entered in the cell **F3** to the remaining rows.
14. Save and close the workbook.

## Excel O365 – Intermediate and Advanced Range Naming

Open the workbook **Best Charity**.

1. Select the data table starting in the cell **A3** (use ctrl shift \* on the keyboard to highlight the data)
2. From the **Formulas** tab, select **Create from Selection** in the **Defined Names** group. Select the option **Top Row** and untick any other options.
3. Check the Ranges have been created using the **Name Box** above column A
4. In the cell H4, use **Insert Function** and select the **COUNTIF** function.  
In the **Range** field, click **use in formula** from the **Formulas** ribbon and select the named range **Type**.  
In the **Criteria** field type in the word **Corporate**. Click **OK**.
5. In the cell H5, use **Insert Function** and select the **COUNTIF** function.  
In the **Range** field, click **use in formula** from the **Formulas** ribbon and select the named range **Type**.  
In the **Criteria** field type in the word **Cash Box**. Click **OK**.
6. In the cell H6, click the **Autosum** button and click **use in formula** from the **Formulas** ribbon to insert the range name **Last Year**.
7. In the cell H7, click the **Autosum** button and click **use in formula** from the **Formulas** ribbon to insert the range name **This Year**.
8. Save and close the workbook.

## Excel O365 – Intermediate and Advanced Advanced Formatting

Open the workbook **Clinic POs** and select the sheet **Clinic POs**.

1. Select all the data in the **Days Late** column (use ctrl shift down arrow). Click **Conditional Formatting, Highlight Cell Rules** and select **More Rules** from the menu options.

Set to **greater than or equal to** and type in **2** for the value.

Click the **Format** button and change the **Font** colour to **Red**.

2. Click in the cell **A4**, select the **View** ribbon and click **Freeze Panes**. Click **Freeze Panes** from the menu options. Scroll down the screen to check the column headings remain in view at the top of the screen.
3. Save and close the workbook.

## Excel O365 – Intermediate and Advanced Protection

Open the workbook **Project Record**.

1. Highlight the cell range **C2:C4**. Right click, select **Format Cells**, click the **Protection** tab and remove the tick from the **Locked** option.
2. Highlight the cell range **A7:E37**. Right click, select **Format Cells**, click the **Protection** tab and remove the tick from the **Locked** option.
3. From the **Review** tab click **Protect Sheet**.
4. Enter the following data in the appropriate cells:
 

<b>Project:</b>	Excel Spreadsheet Audit
<b>Date Commenced:</b>	Enter todays date
<b>Project Owner:</b>	Enter your name
5. Test the locked and unlocked cells. Save and close the workbook.
6. Open the workbook **Percentages**.
7. Adjust the formula in cell **C2** so the cell reference **B8** is absolute. Copy the formula to the cells displaying the errors with the Autofill tool.
8. Adjust the formula in cell **E2** so the cell reference **D8** is absolute. Copy the formula to the cells displaying the errors with the Autofill tool.
9. Highlight the cell range **B2:B7**. Right click, select **Format Cells**, click the **Protection** tab and remove the tick from the **Locked** option.
10. Highlight the cell range **D2:D7**. Right click, select **Format Cells**, click the **Protection** tab and remove the tick from the **Locked** option.
11. From the **Review** tab click **Protect Sheet**, test the locked and unlocked cells.
12. Save and close the workbook.

## Excel O365 – Intermediate and Advanced Complex Functions

Open the exercise workbook **Booking Form**

### Objective:

Create a form that will allow users to choose a meeting room from a drop-down list in the cell A3 and then display the respective Room Size and Location details.

Room Booking Information Form		
Meeting Room	Room Size	Location
[Validation List]	[VLOOKUP]	[VLOOKUP]

- Click the cell **A3**. Click the **Data** tab and click the **Data Validation** icon. Allow a **List** and click into **Source**. Click the **Room Details** sheet and select the cell range **A2:A9** and click **OK**. Select a room of your choice from the Meeting Room list.
- Click the **Room Details** sheet, highlight the cell range **A2:C9**. Click in the **Name** box above column A, type **Rooms** and press enter.
- Click the **Booking Form** sheet and click the cell **B3**. Click the **Fx** button to insert the function **VLOOKUP**, complete the fields as detailed below to display the room size for the room:
 

<b>Lookup value</b>	Room Name – cell <b>A3</b>
<b>Table Array</b>	insert the named range – type in <b>Rooms</b>
<b>Col_index num</b>	click on the <b>Rooms Details</b> sheet to check the column number delete any text and type in <b>2</b>
<b>Range Lookup</b>	ensure the exact match is found – type <b>false</b>
- Click the cell **C3**. Click the **Fx** button to insert the function **VLOOKUP**, complete the fields as detailed below to display the location of the room:
 

<b>Lookup value</b>	Room Name – cell <b>A3</b>
<b>Table Array</b>	insert the named range – type in <b>Rooms</b>
<b>Col_index num</b>	click on the <b>Rooms Details</b> sheet to check the column number delete any text and type in <b>3</b>
<b>Range Lookup</b>	ensure the exact match is found – type <b>false</b>
- Select a different meeting from the list in the cell A3 and check the VLOOKUP functions have worked.
- Save and close the workbook.

## Excel O365 – Intermediate and Advanced Pivot Tables

Open the workbook **Pivots Exercise**.

1. Click into the data table and from the **Insert** tab select **Pivot Table**.
2. Set the rows as: **Creating user**  
Set the columns as: **Status**  
Set the values field as: **Value**
3. If you remove **Status** from the column field drop area, what does the data display?  

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4. Add the **Status** field back to the columns area. What is the total value of orders **Lost in Transit** for the **Creating User** MWILD?  

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5. Add the **Creation Date** field to **Report Filter**.  
What was the total value of orders created on the **08/04/2019** that have the **Status Delivery Expected**?  

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6. Clear the filters from all the fields. Remove all the fields from the PivotTable frame.
7. Set the rows as: **Status**  
Set the columns as: **Creating user**  
Set the values field as: **Value**  
  
Apply a filter to display only the details for **Creating Users** DCAST and MWILD.
8. Change the **Field Settings** for the **Value** data to show the values as **percentages of grand total (% of total)**. What was the total order percentage for these two members of staff for **Orders Delivered**?  

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9. Clear the filters from the fields and reset the **Field Settings** for the **Values** back to **Sum of Value** if it remains as % of Total.
10. Alter the Pivot Table again:  
  
Set the rows as: **Creating User**  
Set the columns as: **Status**  
Set the values field as: **Value**



11. Set the **Creating User** to display only the data for the users: MIKEH, HAYWP and MWILD.
12. Insert a **Pivot Chart**. Select a chart style that you think best represents the data.
13. Move the chart to a new worksheet and name the chart sheet **Order Status**.
14. Save and close the workbook.

**If time allows, try formatting your PivotTable using the PivotTable Styles.  
the PivotTable Styles.**