**Day 17 - 90 days of Analytics: Excel IF Function with AND / OR**

In today’s video, we looked at how we can use AND/OR logical operators with the IF() function

The following were mentioned.

-The **OR()** function, checks whether any of the arguments are TRUE, and returns TRUE or FALSE. Returns FALSE if all arguments are FALSE. Example =OR(D6,E6). Its truth table is shown below.

|  |  |  |
| --- | --- | --- |
| **OR TRUTH TABLE** | | |
| **Condition 1** | **Condition 2** | **OUTPUT** |
| FALSE | FALSE | FALSE |
| FALSE | TRUE | TRUE |
| TRUE | FALSE | TRUE |
| TRUE | TRUE | TRUE |

-The **AND()** function , checks whether all arguments are TRUE, and returns TRUE if all arguments are TRUE. Example =AND(D6,E6). Its truth table is shown below

|  |  |  |
| --- | --- | --- |
| **AND TRUTH TABLE** | | |
| **Condition 1** | **Condition 2** | **OUTPUT** |
| FALSE | FALSE | FALSE |
| FALSE | TRUE | FALSE |
| TRUE | FALSE | FALSE |
| TRUE | TRUE | TRUE |

-It should be noted that the arguments passed to the AND() and OR() functions should be logical values (Boolean values).

-Copying a formula can be done through the **formula bar**. This copies the formula exactly as it is without changing the cell references.

-Depending on the problem at hand, we can either use the AND() or OR() function with the IF() function. Example

* =IF(AND(D5,E5),”Expression TRUE”,”Expression FALSE”)
* =IF(OR(D5,E5),”Expression TRUE”,”Expression FALSE”)

Link to the YouTube Recording: <https://www.youtube.com/watch?v=gxH5Zs08T3M>

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