How can I combine the IF and AND functions in Google Sheets?

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The combination of the IF and AND functions in Google Sheets allows users to create more complex logical statements and perform advanced data analysis. This feature enables the user to set multiple conditions that must be met in order for a specific outcome to be returned. By using the IF and AND functions together, users can create dynamic formulas that can handle a variety of scenarios and make their data analysis more precise and efficient. This powerful combination is especially useful for handling large datasets and performing conditional calculations.

Combine the IF and AND Functions in Google Sheets

You can use the following basic syntax to use the IF and AND functions together in Google Sheets to determine if some cell meets several criteria:

=IF(AND(A1="String",B1>10),"value1","value2")

If the value in cell A1 is equal to "String" and if the value in cell B1 is greater than 10, then we return value1, otherwise we return value2.

Note that we can use as many logical comparisons as we'd like within the AND function.

The following examples show how to use this syntax in practice.

Example 1: Combine IF and AND Functions with String Comparisons

Suppose we have two columns in Google Sheets that

contain the conference and number of wins for various NBA teams:

	A	B	C	D
1	**Team**	**Wins**		
2	West	42		
3	West	38		
4	East	55		
5	West	59		
6	West	38		
7	East	45		
8	East	49		
9	East	60		
10	West	47		
11	East	50		
12	West	34		
13	East	31		
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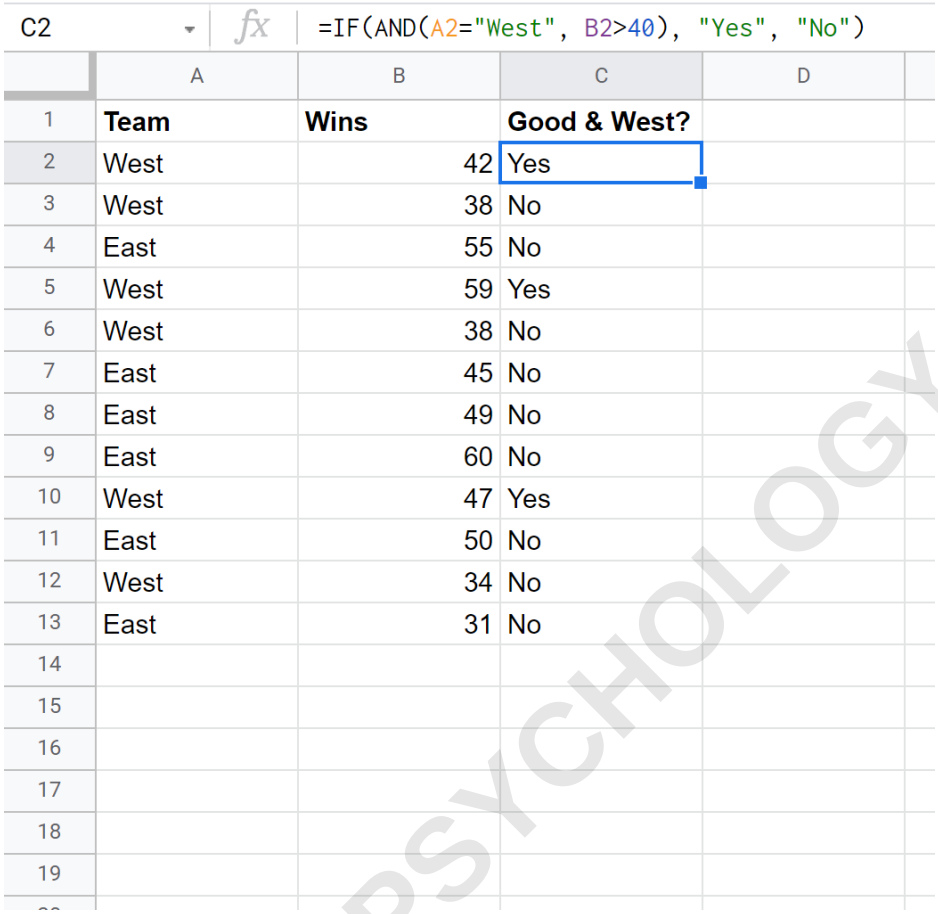
Suppose we classify a team as "Good" if they have more than 40 wins.

We can use the following formula with the IF and AND functions to determine if each team is in the West *and* Good:

=IF(AND(A2="West",B2>40),"Yes","No")

The following screenshot shows how to use this syntax in practice:



	A	B	C	D
1	**Team**	**Wins**	**Good & West?**	
2	West	42	Yes	
3	West	38	No	
4	East	55	No	
5	West	59	Yes	
6	West	38	No	
7	East	45	No	
8	East	49	No	
9	East	60	No	
10	West	47	Yes	
11	East	50	No	
12	West	34	No	
13	East	31	No	
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If a given team is in the West *and* they have more than 40 wins, we return a value of "Yes", otherwise we return "No."

Example 2: Combine IF and AND Functions with Numeric Comparisons

Suppose we have columns that contain the number of points and assists for various basketball players and we'd like to classify each player as "Good" or "Bad."

	A	B	C	D
1	**Points**	**Assists**	**Status**	
2	22	6		
3	25	7		
4	27	2		
5	19	5		
6	15	4		
7	26	11		
8	30	4		
9	7	12		
10	13	14		
11	16	3		
12				
13				
14				
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16				
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Let's say that if a player has more than 20 points and more than 5 assists, we will classify them as "Good", otherwise we'll classify them as "Bad."

We can use the following formula with the IF and AND functions to determine if each player should be classified as "Good" or Bad":

=IF(AND(A2>20,B2>5),"Good","Bad")

The following screenshot shows how to use this syntax

in practice:

C2 =IF(AND(A2>20, B2>5), "Good", "Bad")

	A	B	C	D
1	**Points**	**Assists**	**Status**	
2	22	6	Good	
3	25	7	Good	
4	27	2	Bad	
5	19	5	Bad	
6	15	4	Bad	
7	26	11	Good	
8	30	4	Bad	
9	7	12	Bad	
10	13	14	Bad	
11	16	3	Bad	
12				
13				
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If a given player has more than 20 points and more than 5 assists, we classify them as "Good."

Otherwise we classify them as "Bad."