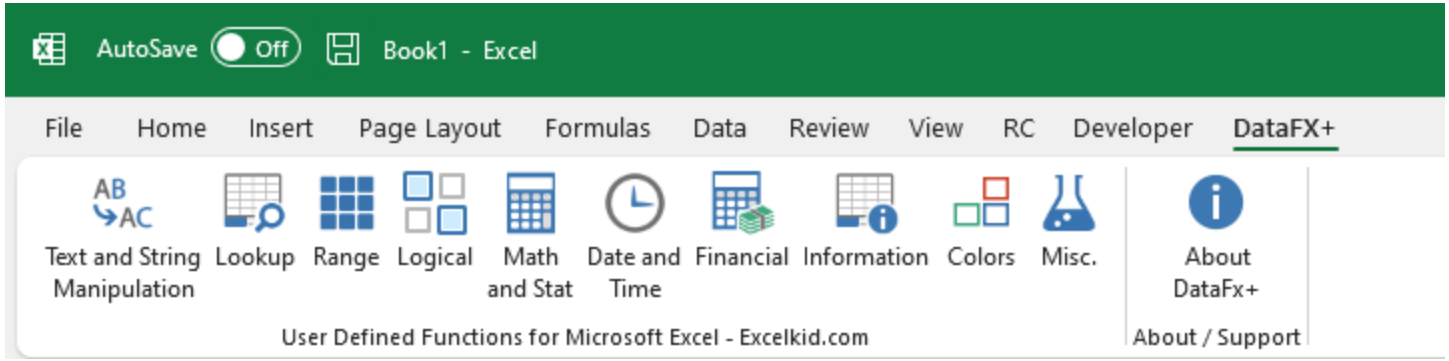
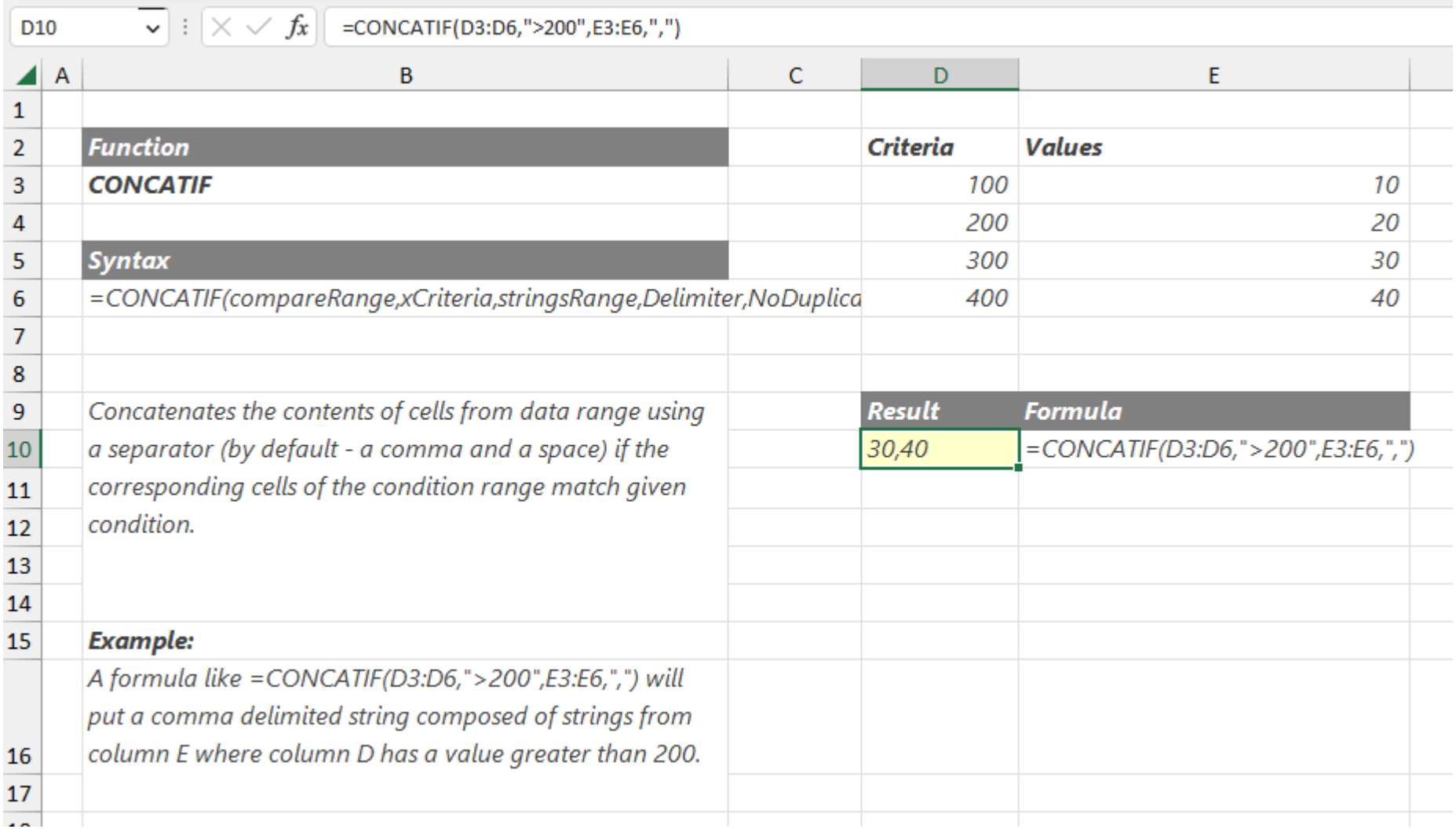
DataFX for Excel

Logical functions



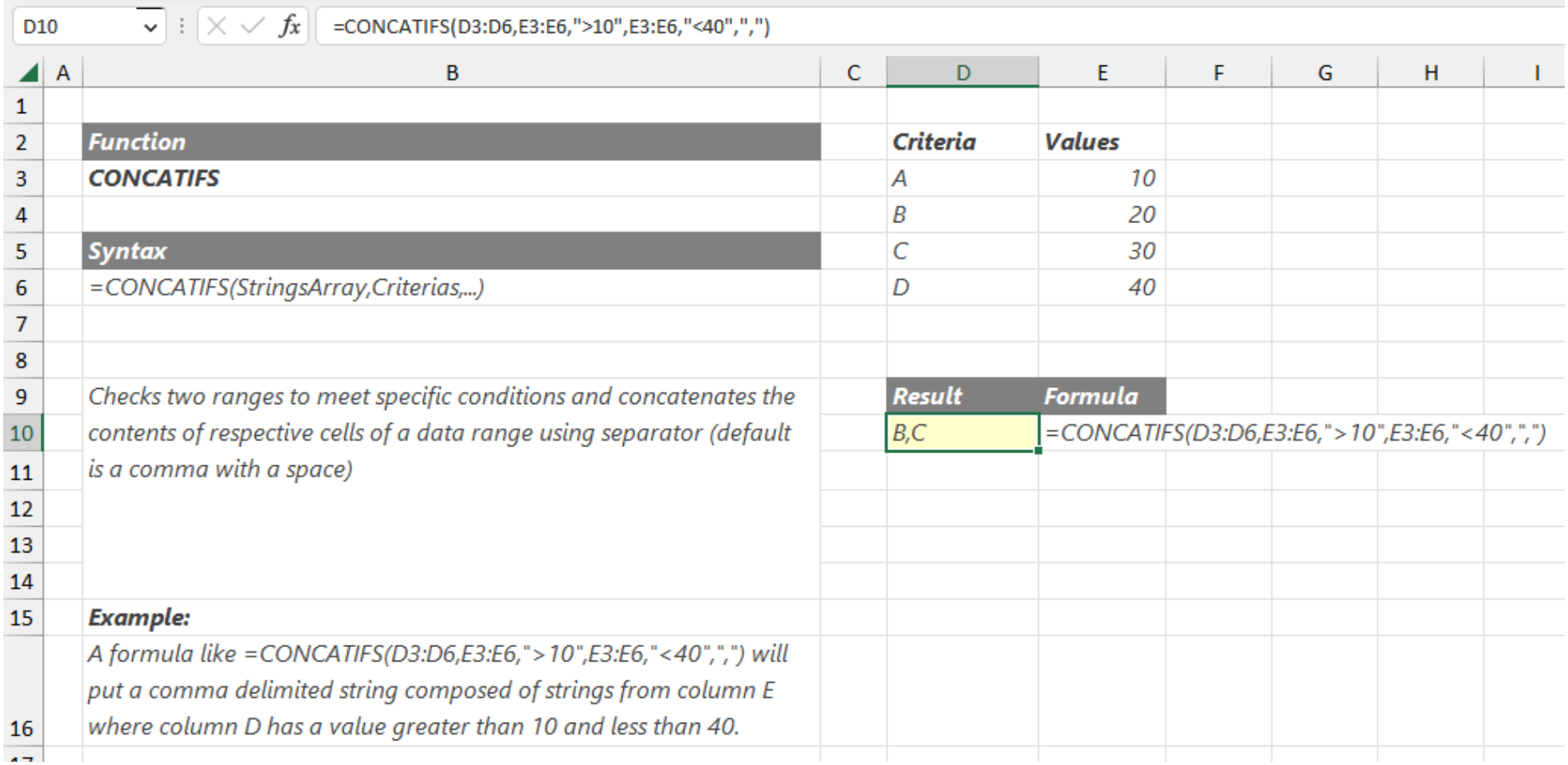
CONCATIF



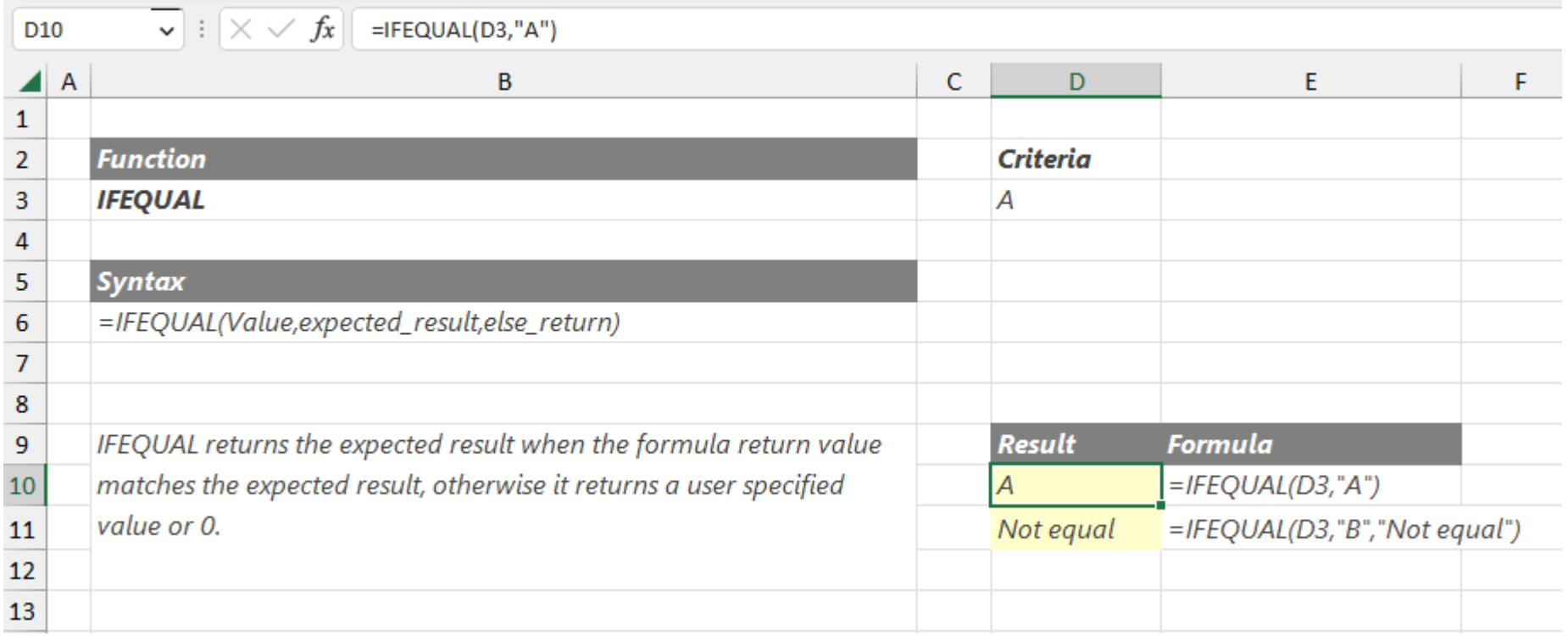
D10 | =CONCATIF(D3:D6,">200",E3:E6,",")

	A	B	C	D	E
1					
2		***Function***		***Criteria***	***Values***
3		***CONCATIF***		*100*	*10*
4				*200*	*20*
5		***Syntax***		*300*	*30*
6		*=CONCATIF(compareRange,xCriteria,stringsRange,Delimiter,NoDuplica*		*400*	*40*
7					
8					
9		*Concatenates the contents of cells from data range using*		***Result***	***Formula***
10		*a separator (by default - a comma and a space) if the*		*30,40*	*=CONCATIF(D3:D6,">200",E3:E6,",")*
11		*corresponding cells of the condition range match given*			
12		*condition.*			
13					
14					
15		***Example:***			
16		*A formula like =CONCATIF(D3:D6,">200",E3:E6,",") will put a comma delimited string composed of strings from column E where column D has a value greater than 200.*			
17					

CONCATIFS

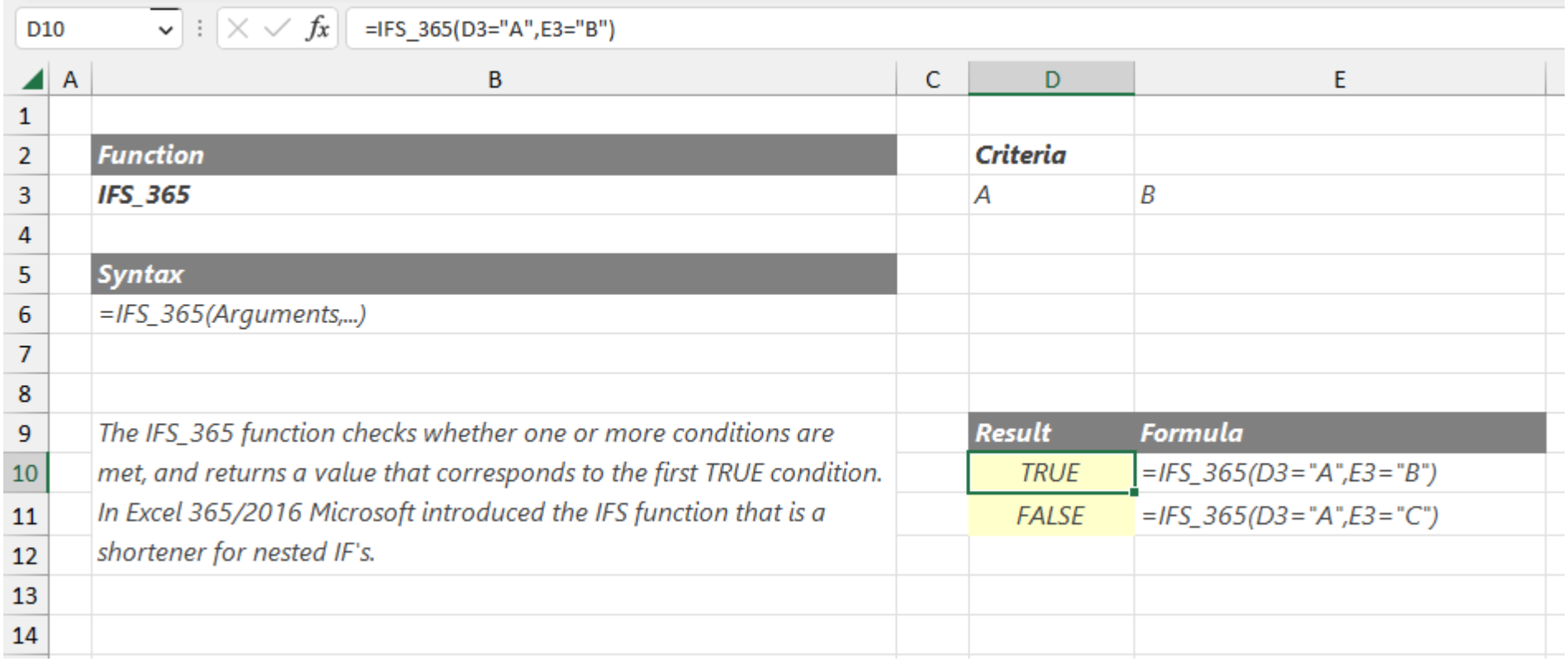

D10
=CONCATIFS(D3:D6,E3:E6,">10",E3:E6,"<40",",")
Function
CONCATIFS
Syntax
=CONCATIFS(StringsArray,Criterias,...)
Checks two ranges to meet specific conditions and concatenates the contents of respective cells of a data range using separator (default is a comma with a space)
Example:
A formula like =CONCATIFS(D3:D6,E3:E6,">10",E3:E6,"<40",",") will put a comma delimited string composed of strings from column E where column D has a value greater than 10 and less than 40.
Criteria
Values
A 10
B 20
C 30
D 40
Result
Formula
B,C
=CONCATIFS(D3:D6,E3:E6,">10",E3:E6,"<40",",")

IFEQUAL



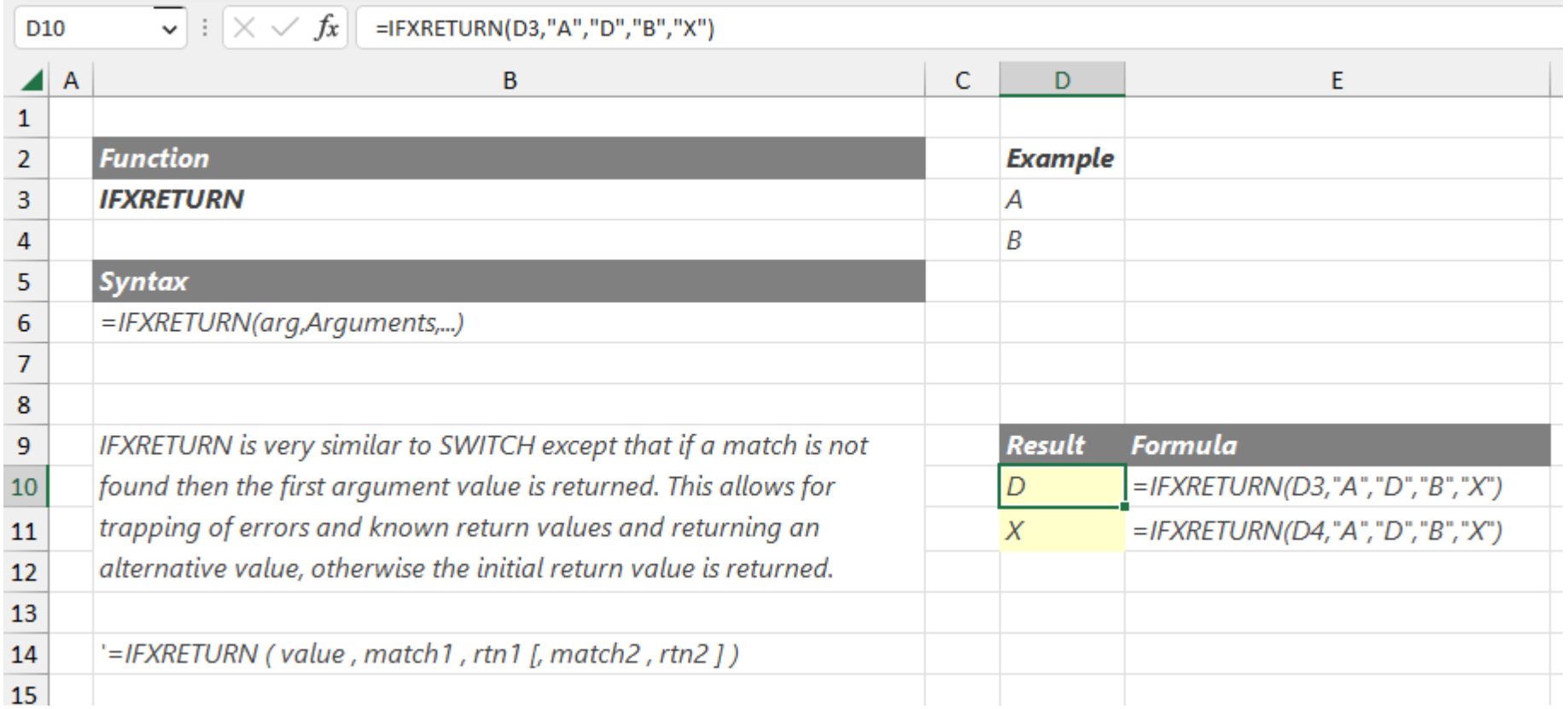
	A	B	C	D	E	F
1						
2		***Function***		***Criteria***		
3		***IFEQUAL***		*A*		
4						
5		***Syntax***				
6		*=IFEQUAL(Value,expected_result,else_return)*				
7						
8						
9		*IFEQUAL returns the expected result when the formula return value*		***Result***	***Formula***	
10		*matches the expected result, otherwise it returns a user specified*		*A*	*=IFEQUAL(D3,"A")*	
11		*value or 0.*		*Not equal*	*=IFEQUAL(D3,"B","Not equal")*	
12						
13						

IFS_365



	A	B	C	D	E
1					
2		**Function**		**Criteria**	
3		**IFS_365**		A	B
4					
5		**Syntax**			
6		=IFS_365(Arguments,...)			
7					
8					
9		The IFS_365 function checks whether one or more conditions are		**Result**	**Formula**
10		met, and returns a value that corresponds to the first TRUE condition.		TRUE	=IFS_365(D3="A",E3="B")
11		In Excel 365/2016 Microsoft introduced the IFS function that is a		FALSE	=IFS_365(D3="A",E3="C")
12		shortener for nested IF's.			
13					
14					

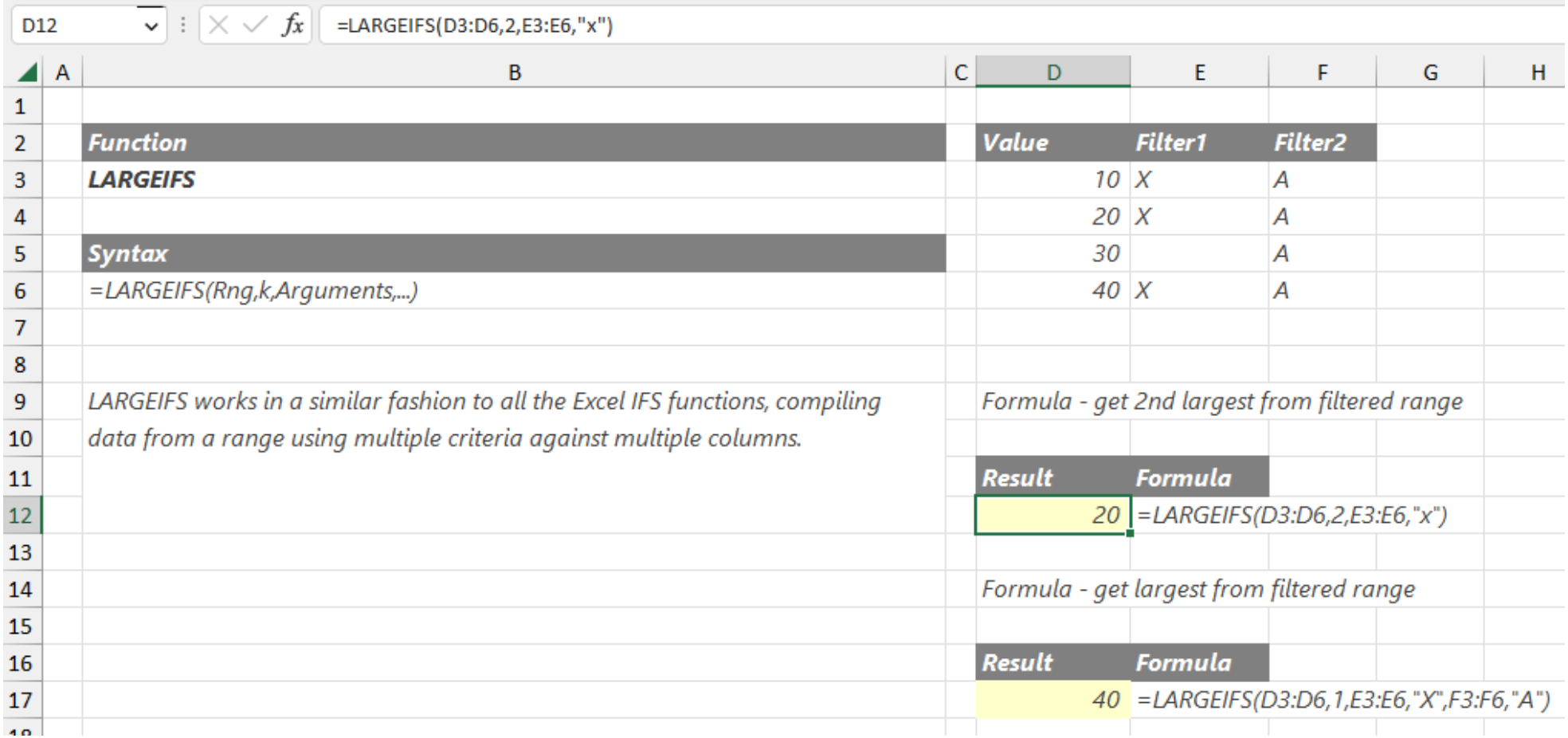
IFXRETURN



D10 | =IFXRETURN(D3,"A","D","B","X")

	A	B	C	D	E
1					
2		**Function**		**Example**	
3		**IFXRETURN**		A	
4				B	
5		**Syntax**			
6		=IFXRETURN(arg,Arguments,...)			
7					
8					
9		IFXRETURN is very similar to SWITCH except that if a match is not		**Result**	**Formula**
10		found then the first argument value is returned. This allows for		D	=IFXRETURN(D3,"A","D","B","X")
11		trapping of errors and known return values and returning an		X	=IFXRETURN(D4,"A","D","B","X")
12		alternative value, otherwise the initial return value is returned.			
13					
14		'=IFXRETURN (value , match1 , rtn1 [, match2 , rtn2])			
15					

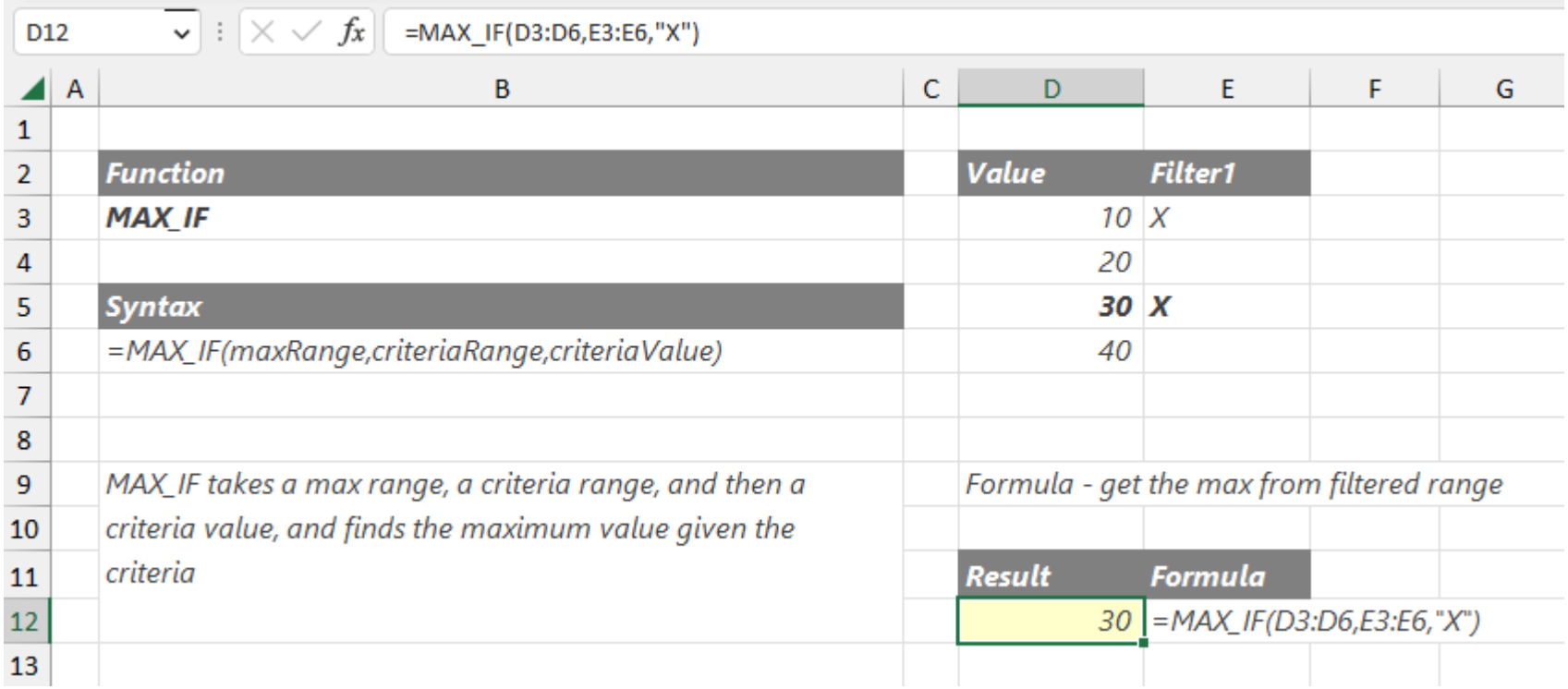
LARGEIFS



D12 | =LARGEIFS(D3:D6,2,E3:E6,"x")

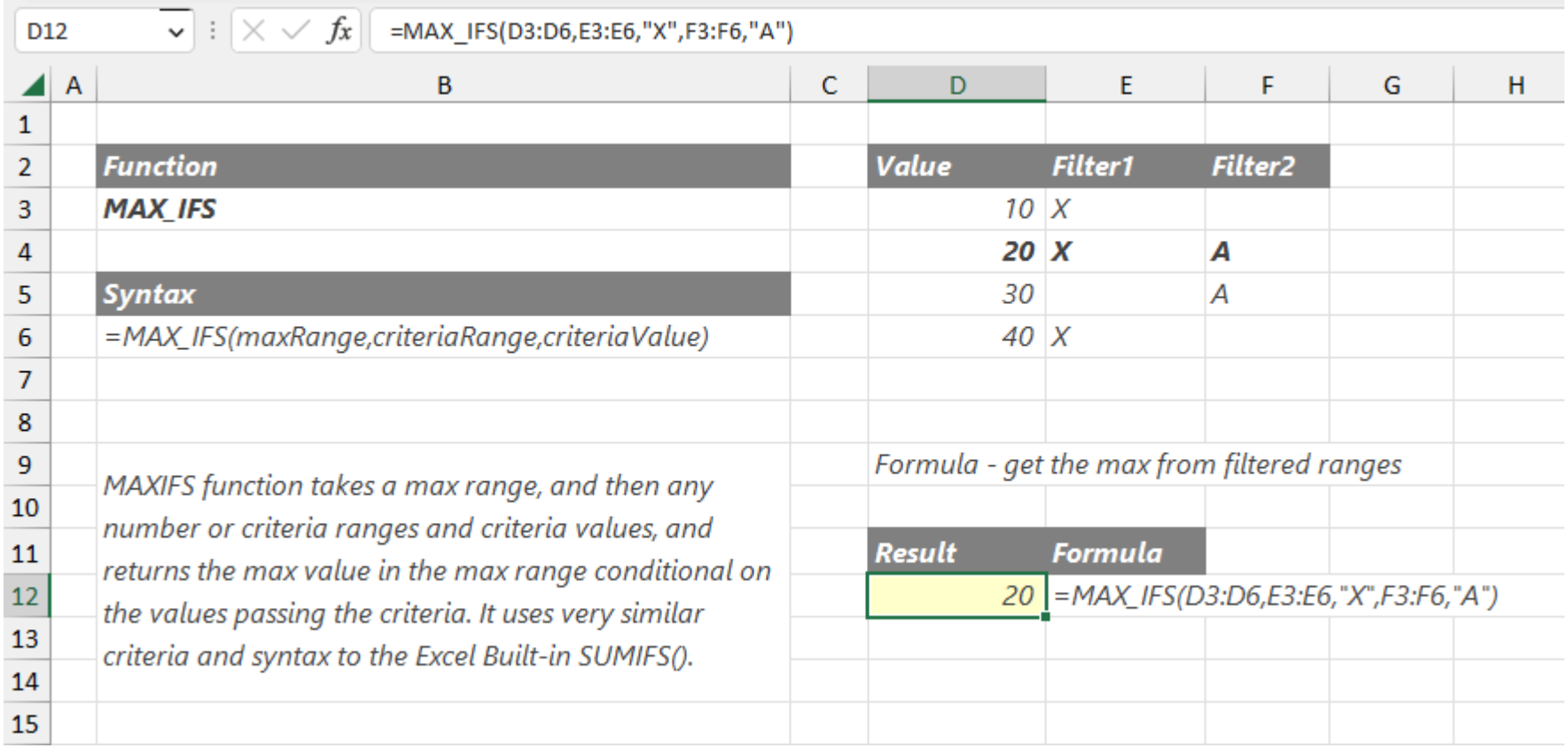
	A	B	C	D	E	F	G	H
1								
2		**Function**		**Value**	**Filter1**	**Filter2**		
3		**LARGEIFS**		10	X	A		
4				20	X	A		
5		**Syntax**		30		A		
6		=LARGEIFS(Rng,k,Arguments,...)		40	X	A		
7								
8								
9		LARGEIFS works in a similar fashion to all the Excel IFS functions, compiling		Formula - get 2nd largest from filtered range				
10		data from a range using multiple criteria against multiple columns.						
11				**Result**	**Formula**			
12				20	=LARGEIFS(D3:D6,2,E3:E6,"x")			
13								
14				Formula - get largest from filtered range				
15								
16				**Result**	**Formula**			
17				40	=LARGEIFS(D3:D6,1,E3:E6,"X",F3:F6,"A")			

MAXIF

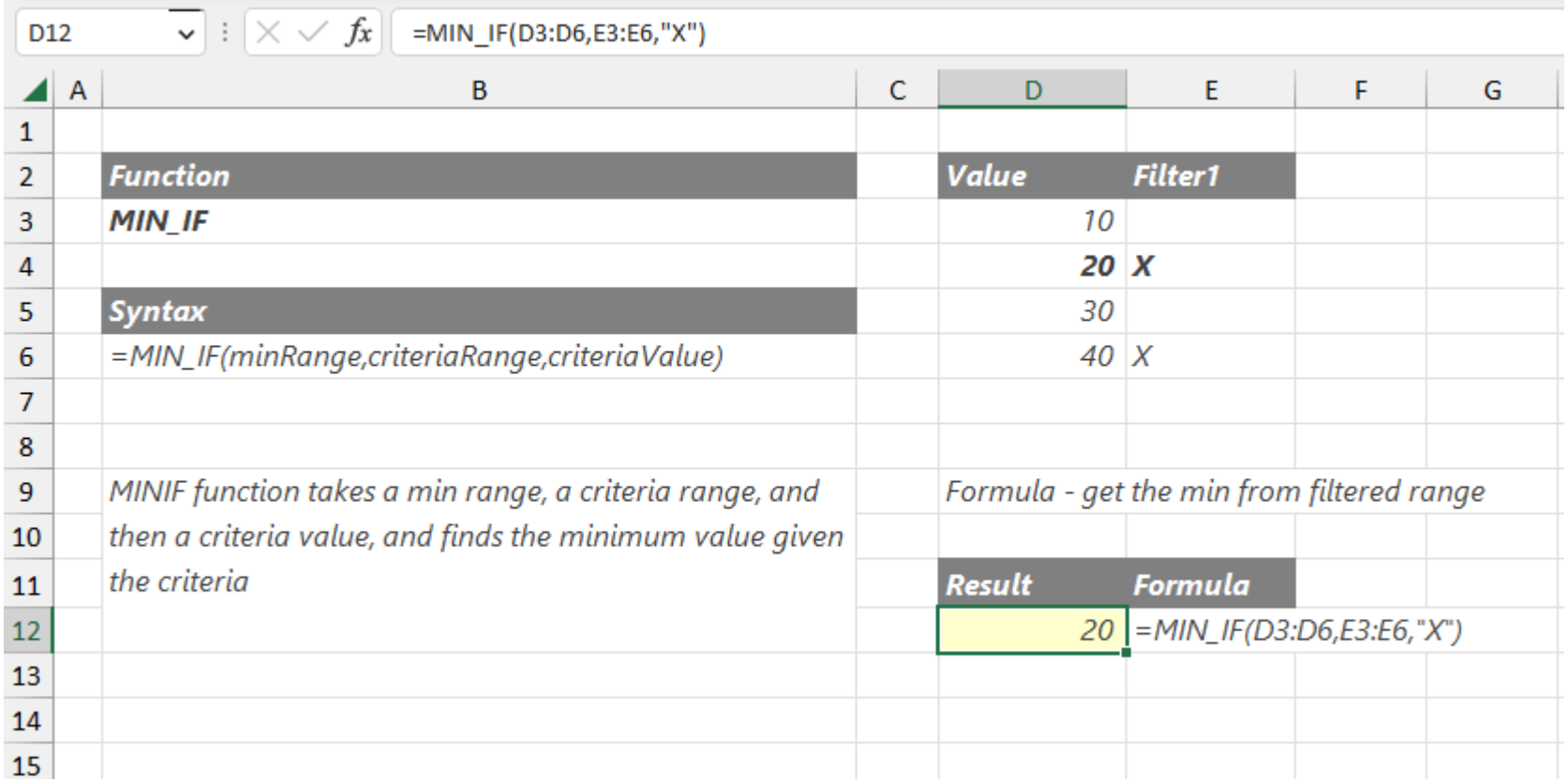


	A	B	C	D	E	F	G
1							
2		**Function**		**Value**	**Filter1**		
3		***MAX_IF***		10	X		
4				20			
5		**Syntax**		**30**	**X**		
6		=MAX_IF(maxRange,criteriaRange,criteriaValue)		40			
7							
8							
9		MAX_IF takes a max range, a criteria range, and then a		Formula - get the max from filtered range			
10		criteria value, and finds the maximum value given the					
11		criteria		**Result**	**Formula**		
12				30	=MAX_IF(D3:D6,E3:E6,"X")		
13							

MAX_IFS

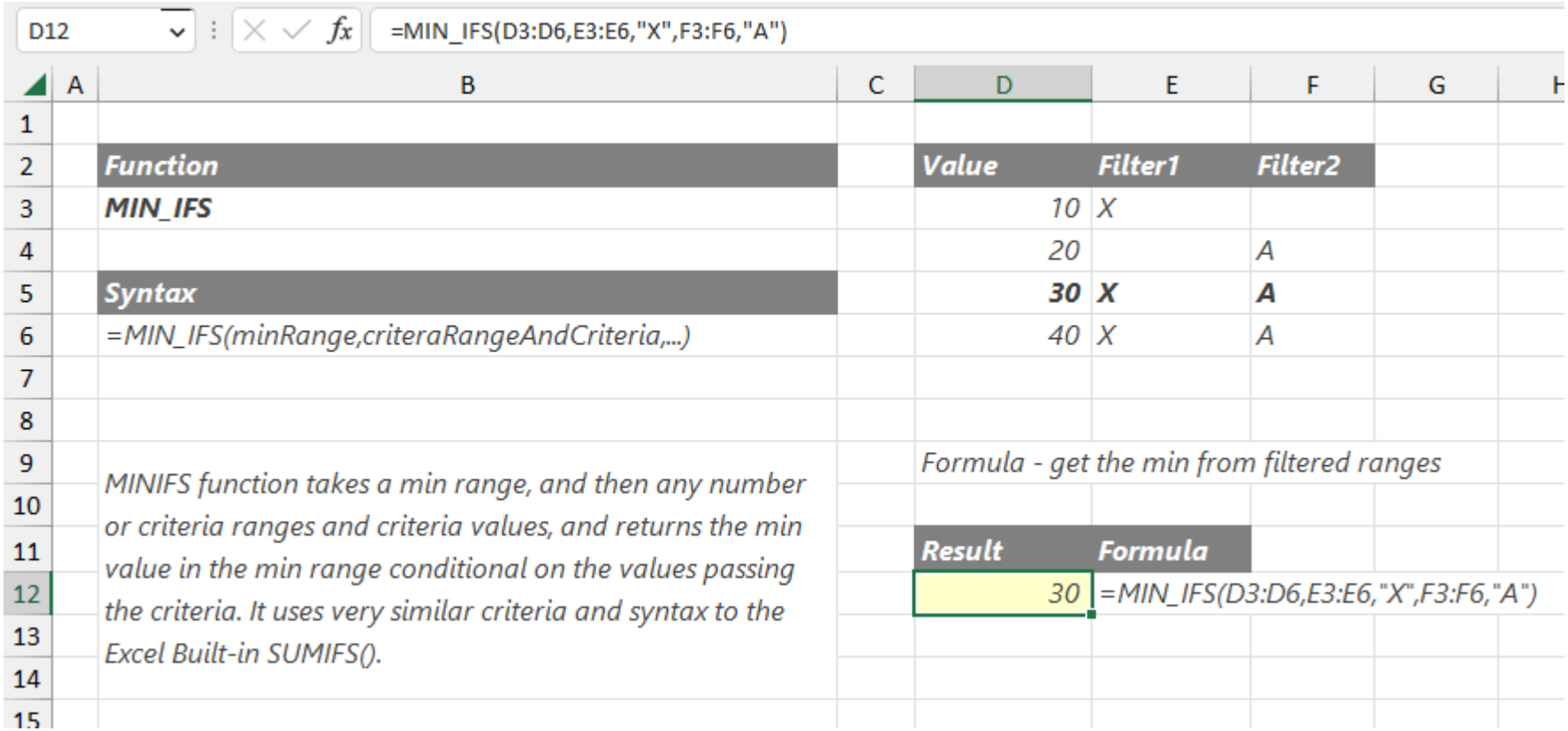

D12
=MAX_IFS(D3:D6,E3:E6,"X",F3:F6,"A")
Function
MAX_IFS
Syntax
=MAX_IFS(maxRange,criteriaRange,criteriaValue)
MAXIFS function takes a max range, and then any number or criteria ranges and criteria values, and returns the max value in the max range conditional on the values passing the criteria. It uses very similar criteria and syntax to the Excel Built-in SUMIFS().
Value
Filter1
Filter2
10 X
20 X A
30 A
40 X
Formula - get the max from filtered ranges
Result
Formula
20
=MAX_IFS(D3:D6,E3:E6,"X",F3:F6,"A")

MIN_IF

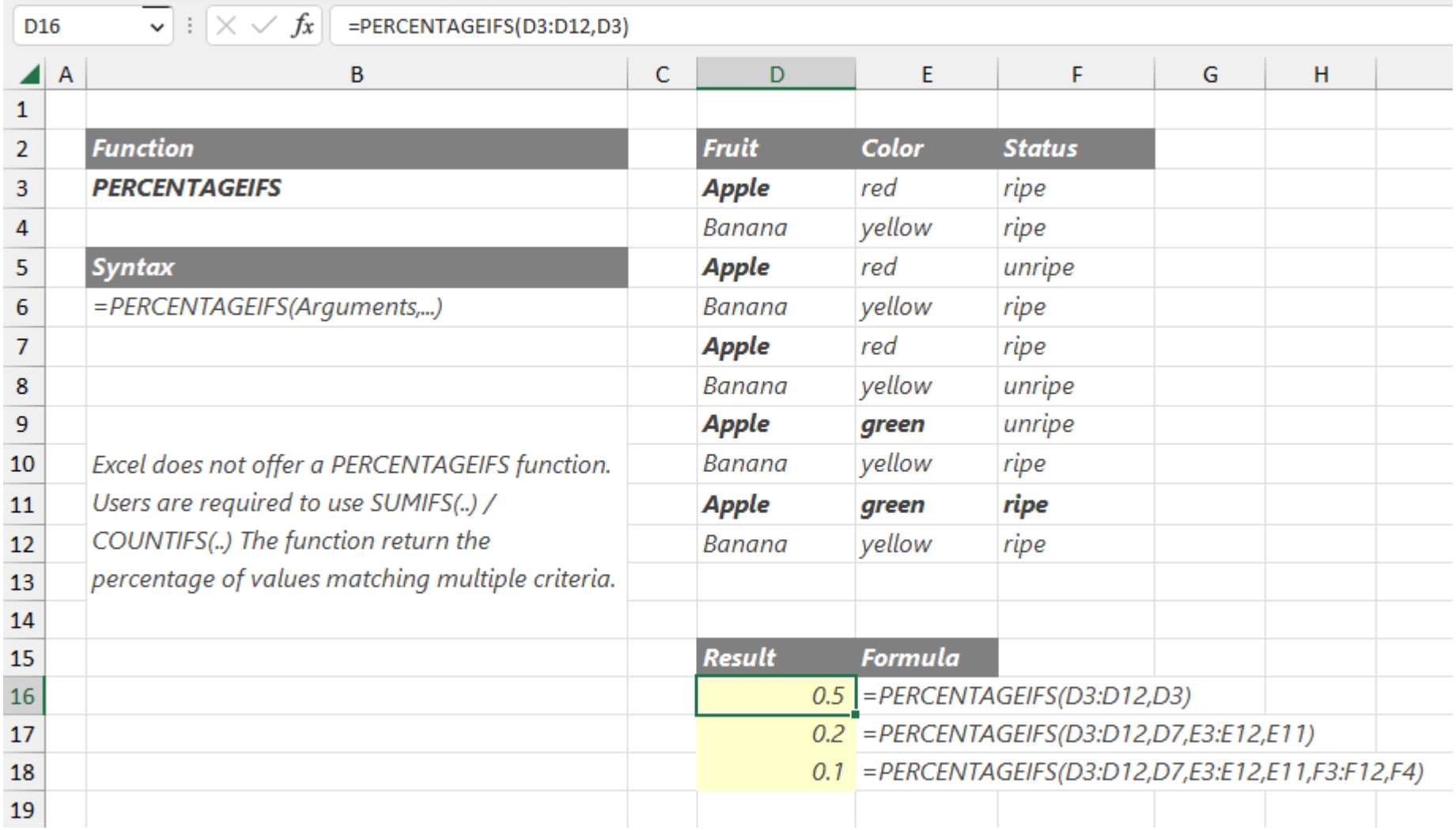


	A	B	C	D	E	F	G
1							
2		***Function***		***Value***	***Filter1***		
3		***MIN_IF***		*10*			
4				***20***	***X***		
5		***Syntax***		*30*			
6		*=MIN_IF(minRange,criteriaRange,criteriaValue)*		*40*	*X*		
7							
8							
9		*MINIF function takes a min range, a criteria range, and*		*Formula - get the min from filtered range*			
10		*then a criteria value, and finds the minimum value given*					
11		*the criteria*		***Result***	***Formula***		
12				*20*	*=MIN_IF(D3:D6,E3:E6,"X")*		
13							
14							
15							

MIN_IFS


D12
=MIN_IFS(D3:D6,E3:E6,"X",F3:F6,"A")
Function
MIN_IFS
Syntax
=MIN_IFS(minRange,criteraRangeAndCriteria,...)
MINIFS function takes a min range, and then any number or criteria ranges and criteria values, and returns the min value in the min range conditional on the values passing the criteria. It uses very similar criteria and syntax to the Excel Built-in SUMIFS().
Value
Filter1
Filter2
10
X
20
A
30
X
A
40
X
A
Formula - get the min from filtered ranges
Result
Formula
30
=MIN_IFS(D3:D6,E3:E6,"X",F3:F6,"A")

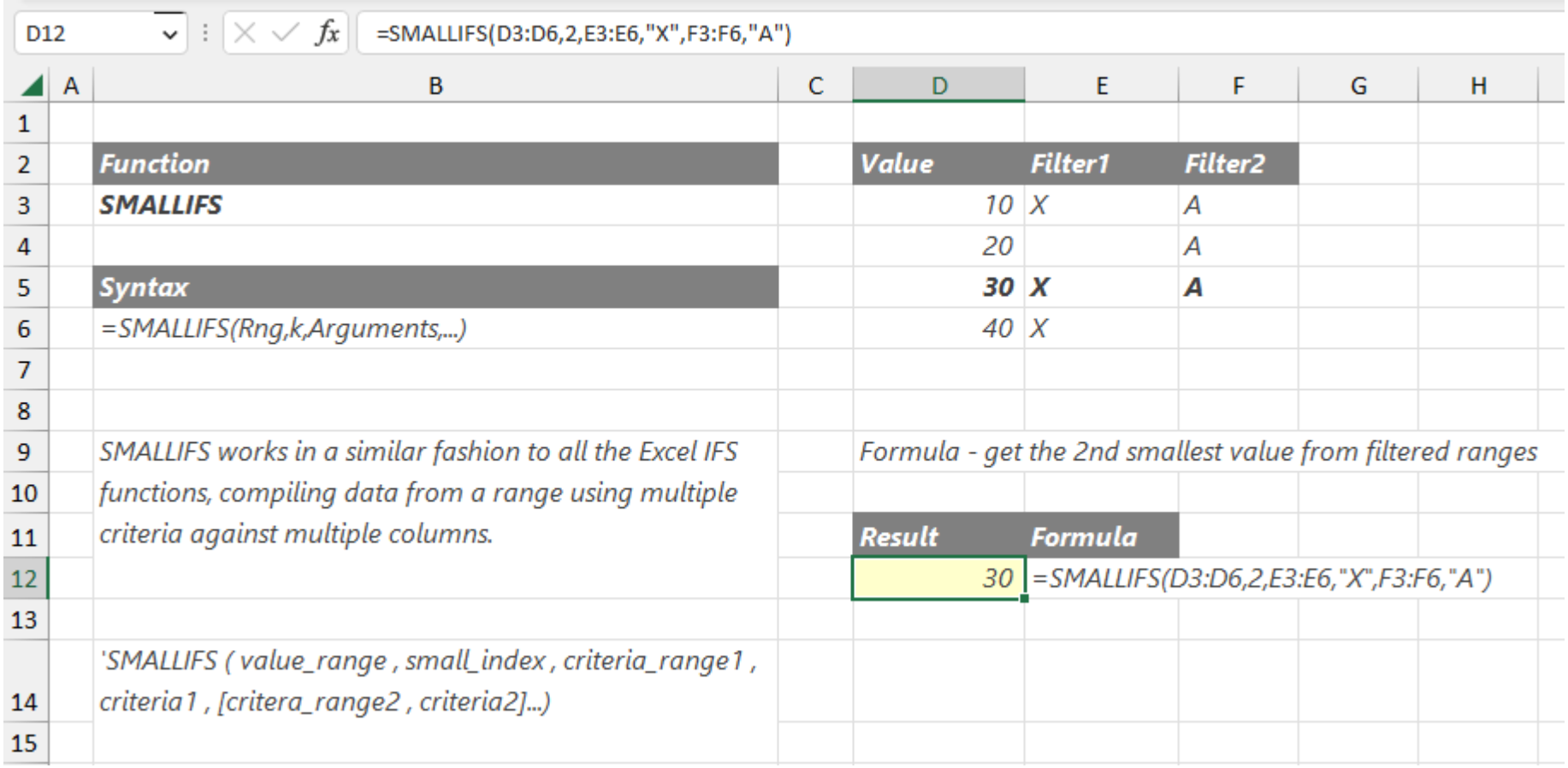
PERCENTAGEIFS



D16 | =PERCENTAGEIFS(D3:D12,D3)

	A	B	C	D	E	F	G	H
1								
2		**Function**		**Fruit**	**Color**	**Status**		
3		**PERCENTAGEIFS**		**Apple**	red	ripe		
4				Banana	yellow	ripe		
5		**Syntax**		**Apple**	red	unripe		
6		=PERCENTAGEIFS(Arguments,...)		Banana	yellow	ripe		
7				**Apple**	red	ripe		
8				Banana	yellow	unripe		
9				**Apple**	**green**	unripe		
10		Excel does not offer a PERCENTAGEIFS function.		Banana	yellow	ripe		
11		Users are required to use SUMIFS(..) /		**Apple**	**green**	**ripe**		
12		COUNTIFS(..) The function return the		Banana	yellow	ripe		
13		percentage of values matching multiple criteria.						
14								
15				**Result**	**Formula**			
16				0.5	=PERCENTAGEIFS(D3:D12,D3)			
17				0.2	=PERCENTAGEIFS(D3:D12,D7,E3:E12,E11)			
18				0.1	=PERCENTAGEIFS(D3:D12,D7,E3:E12,E11,F3:F12,F4)			
19								

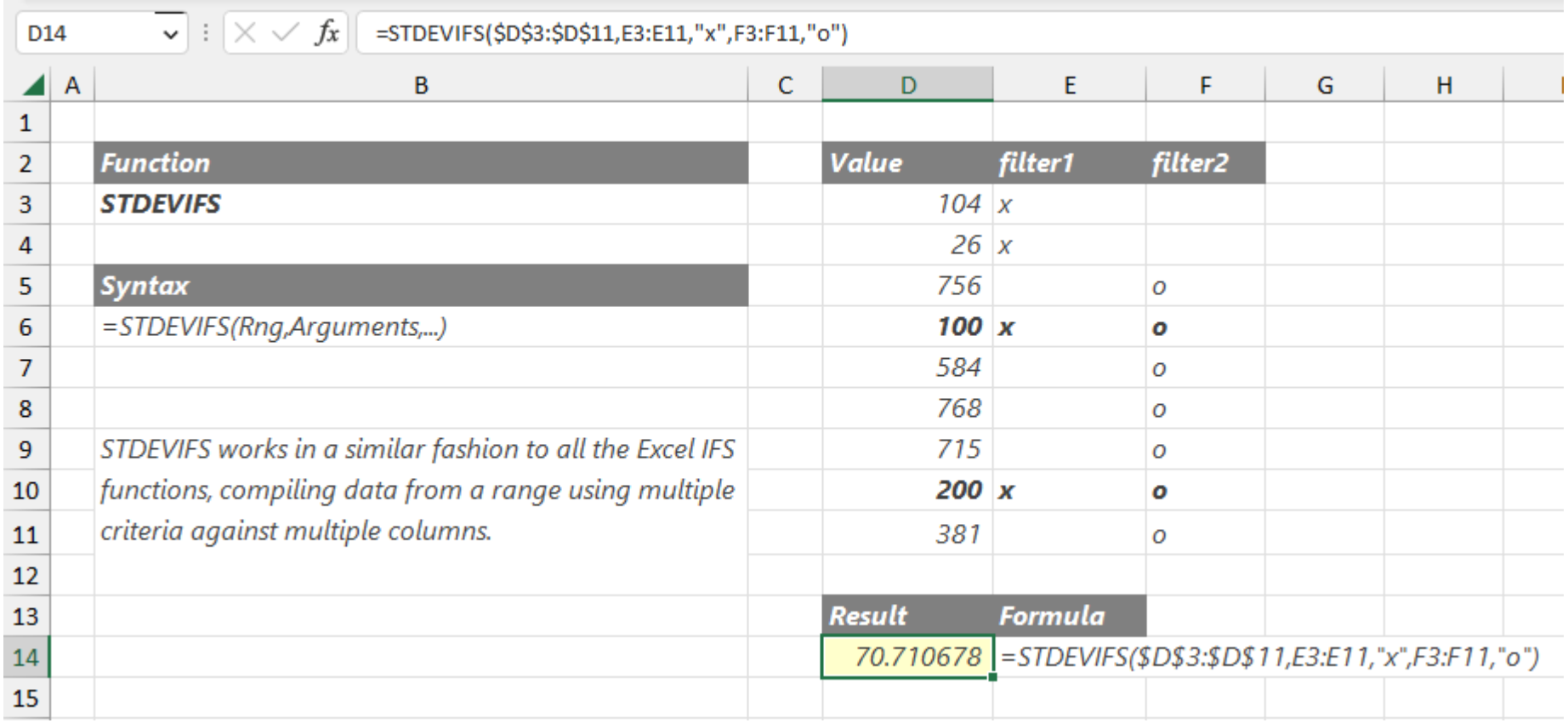
SMALLIFS



D12 =SMALLIFS(D3:D6,2,E3:E6,"X",F3:F6,"A")

	A	B	C	D	E	F	G	H
1								
2		***Function***		***Value***	***Filter1***	***Filter2***		
3		***SMALLIFS***		*10*	*X*	*A*		
4				*20*		*A*		
5		***Syntax***		***30***	***X***	***A***		
6		*=SMALLIFS(Rng,k,Arguments,...)*		*40*	*X*			
7								
8								
9		*SMALLIFS works in a similar fashion to all the Excel IFS*		*Formula - get the 2nd smallest value from filtered ranges*				
10		*functions, compiling data from a range using multiple*						
11		*criteria against multiple columns.*		***Result***	***Formula***			
12				*30*	*=SMALLIFS(D3:D6,2,E3:E6,"X",F3:F6,"A")*			
13								
14		*'SMALLIFS (value_range , small_index , criteria_range1 , criteria1 , [critera_range2 , criteria2]...)*						
15								

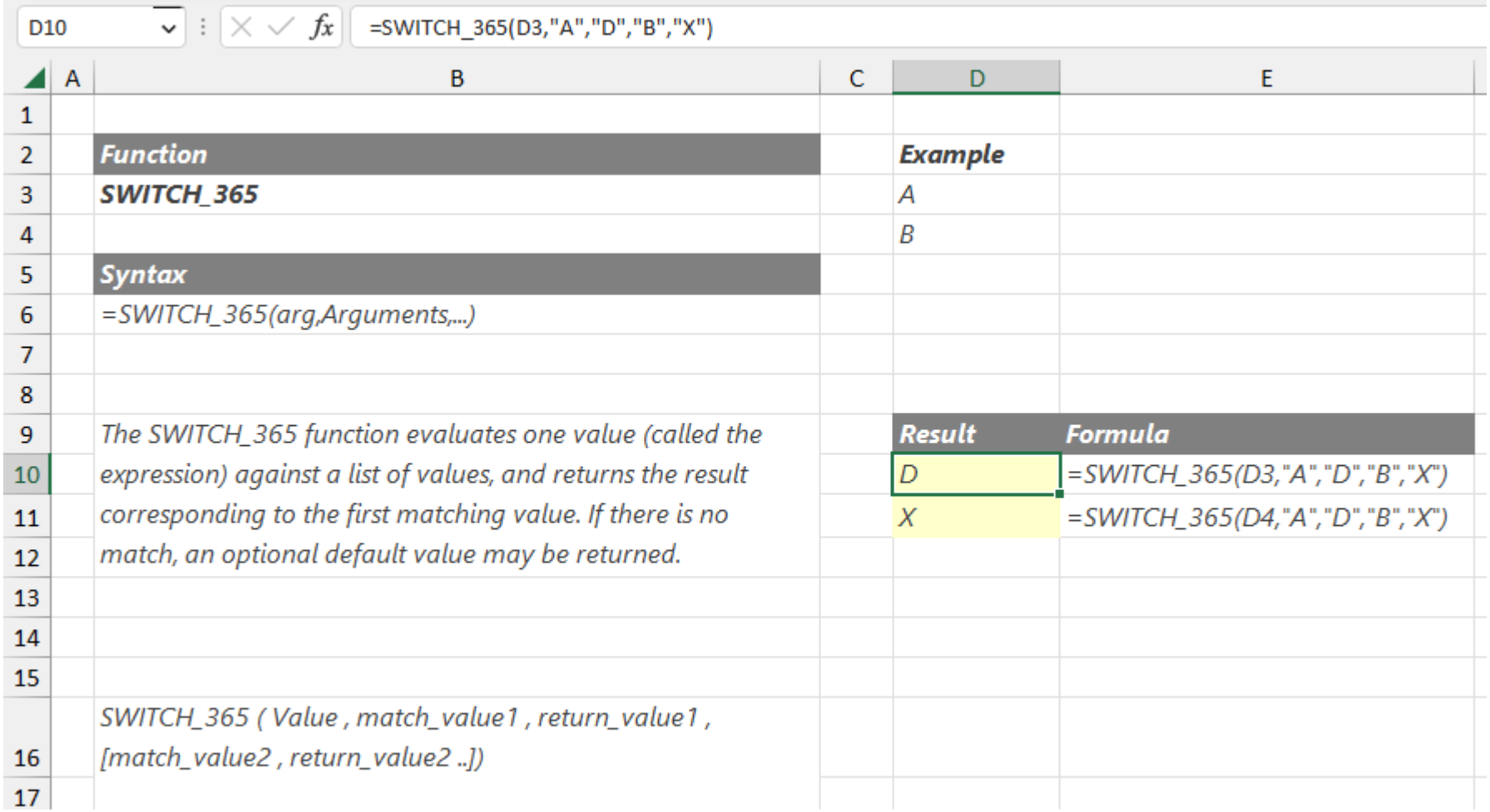
STDEVIFS



D14 | =STDEVIFS($D$3:$D$11,E3:E11,"x",F3:F11,"o")

	A	B	C	D	E	F	G	H
1								
2		**Function**		**Value**	**filter1**	**filter2**		
3		**STDEVIFS**		104	x			
4				26	x			
5		**Syntax**		756		o		
6		=STDEVIFS(Rng,Arguments,...)		**100**	**x**	**o**		
7				584		o		
8				768		o		
9		STDEVIFS works in a similar fashion to all the Excel IFS		715		o		
10		functions, compiling data from a range using multiple		**200**	**x**	**o**		
11		criteria against multiple columns.		381		o		
12								
13				**Result**	**Formula**			
14				70.710678	=STDEVIFS($D$3:$D$11,E3:E11,"x",F3:F11,"o")			
15								

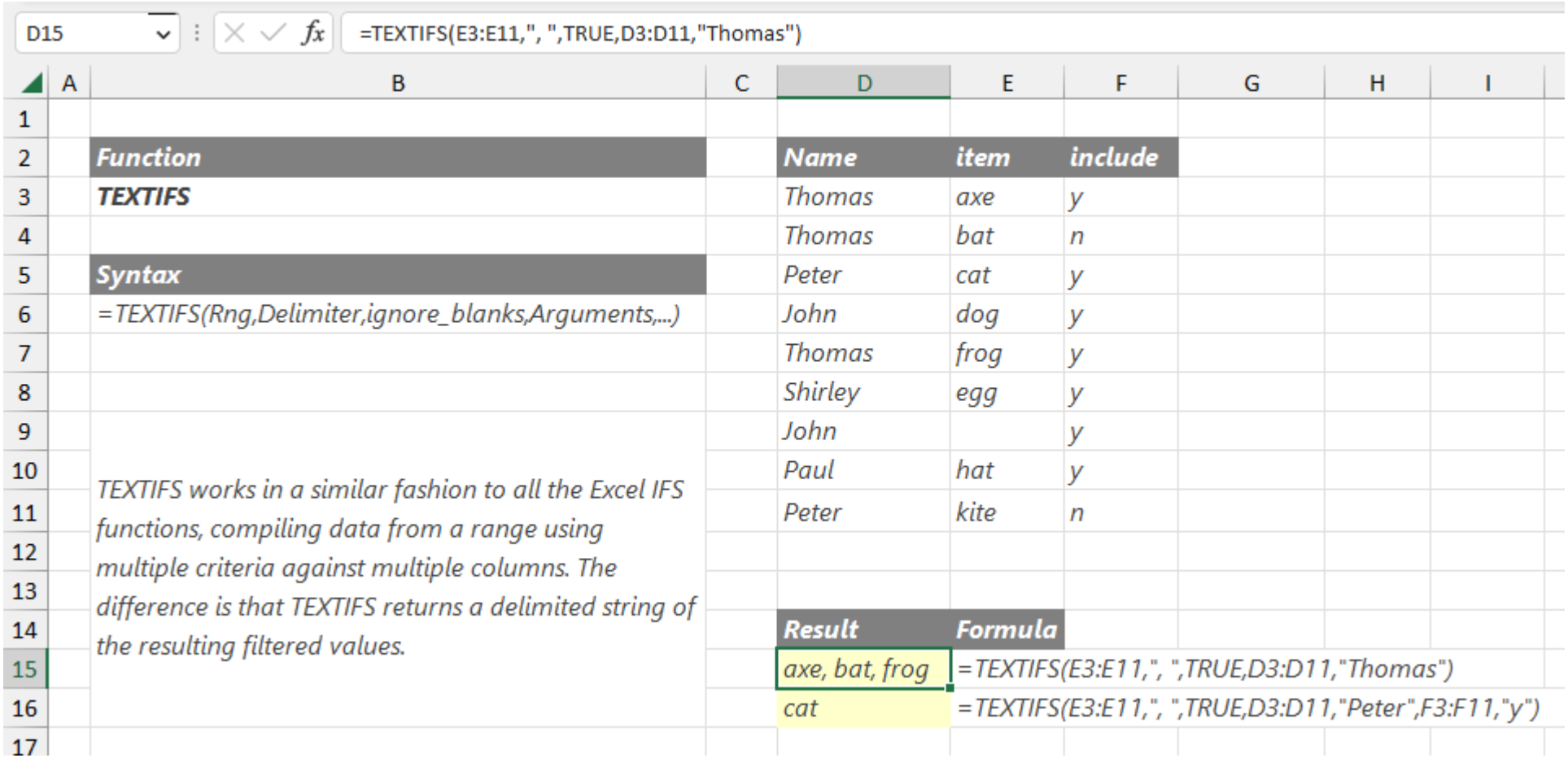
SWITCH_365



D10 =SWITCH_365(D3,"A","D","B","X")

	A	B	C	D	E
1					
2		***Function***		***Example***	
3		***SWITCH_365***		*A*	
4				*B*	
5		***Syntax***			
6		*=SWITCH_365(arg,Arguments,...)*			
7					
8					
9		*The SWITCH_365 function evaluates one value (called the*		***Result***	***Formula***
10		*expression) against a list of values, and returns the result*		*D*	*=SWITCH_365(D3,"A","D","B","X")*
11		*corresponding to the first matching value. If there is no*		*X*	*=SWITCH_365(D4,"A","D","B","X")*
12		*match, an optional default value may be returned.*			
13					
14					
15					
16		*SWITCH_365 (Value , match_value1 , return_value1 , [match_value2 , return_value2 ..])*			
17					

TEXTIFS



D15 =TEXTIFS(E3:E11,", ",TRUE,D3:D11,"Thomas")

Function
TEXTIFS

Syntax
=TEXTIFS(Rng,Delimiter,ignore_blanks,Arguments,...)

TEXTIFS works in a similar fashion to all the Excel IFS functions, compiling data from a range using multiple criteria against multiple columns. The difference is that TEXTIFS returns a delimited string of the resulting filtered values.

Name	item	include
Thomas	axe	y
Thomas	bat	n
Peter	cat	y
John	dog	y
Thomas	frog	y
Shirley	egg	y
John		y
Paul	hat	y
Peter	kite	n

Result	Formula
axe, bat, frog	=TEXTIFS(E3:E11,", ",TRUE,D3:D11,"Thomas")
cat	=TEXTIFS(E3:E11,", ",TRUE,D3:D11,"Peter",F3:F11,"y")