



Preventing "#DIV/0!" Messages

Ever see **#DIV/0!** in a cell? This is Excel's way of telling you that a value is being divided by zero.

	A	B	C	D	E	F	G	H	I	J
1	Rtgs	Sept			July			% Difference		
2	NSI P18-49	RTG	SHR	(000)	RTG	SHR	(000)	RTG	SHR	(000)
3	WXXX	2.0	20	750	1.0	12	600	100%	67%	25%
4	WYYY	1.0	0	0	0.0	0	0	#DIV/0!	#DIV/0!	#DIV/0!
5	WZZZ	0.5	0	0	0.0	0	0	#DIV/0!	#DIV/0!	#DIV/0!

In the example to the right, the formula in cell **H3** works fine because the value in **E3** is not zero.

H3		fx = (B3-E3)/E3									
1	Rtgs	Sept			July			% Difference			
2	NSI P18-49	RTG	SHR	(000)	RTG	SHR	(000)	RTG	SHR	(000)	
3	WXXX	2.0	20	750	1.0	12	600	100%	67%	25%	

But in the next example, **E4** is zero, so the **#DIV/0!** warning appears.

H4		fx = (B4-E4)/E4			
		July			% Difference
		RTG	SHR	(000)	RTG
		1.0	12	600	100%
		0.0	0	0	#DIV/0!

You can use an **"=IF"** function to tell Excel to display a message of your choice instead of the **#DIV/0!** warning.

An **=IF** function has 3 parts:

Part 1: The logical test (*Is E4=0?*)

Part 2: What to do if the answer to the test is "yes"

Part 3: What to do if the answer to the question is "no"

H4		fx = IF(E4=0,"NG",(B4-E4)/E4)			
		July			% Difference
		RTG	SHR	(000)	RTG
		1.0	12	600	100%
		0.0	0	0	#DIV/0!

Translation of **=IF(E4=0,"NG",(B4-E4)/E4)**:

Test: Is the value in **E4** 0?

If **yes:** Display the letters **NG** in the cell

If **no:** Subtract **E4** from **B4**, then divide the result by the value in **E4**

Note: Instead of "NG" you can display whatever you like.

For example: **=IF(E4=0,"There's a zero in the formula", (B4-E4)/E4)**

H4		fx = IF(E4=0,"NG",(B4-E4)/E4)									
1	Rtgs	Sept			July			% Difference			
2	NSI P18-49	RTG	SHR	(000)	RTG	SHR	(000)	RTG	SHR	(000)	
3	WXXX	2.0	20	750	1.0	12	600	100%	67%	25%	
4	WYYY	1.0	0	0	0.0	0	0	NG	NG	NG	
5	WZZZ	0.5	0	0	0.0	0	0	NG	NG	NG	