How to calculate r-squared in Excel

One way to think about r-squared is that it is simply the correlation squared. If you look at it this way, then there are two different ways to calculate r-squared in Excel.

In this example, we are looking at the weekly returns of Apple (**AAPL**) and the **S&P 500** between **September 29** and **December 9, 2019**.

Each of these options will give you the same result. In this example, **67%** of the weekly change in Apple's prices can be explained by corresponding changes in the S&P 500.

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Option 1: First, you'll want to find the correlation of the numbers in your data set using the correlation formula – **=CORREL(B4:B13,C4:C13)**. After you find the correlation, then you simply take that number and square it – **=E6^2**. This gives you the r-squared.

Option 2: In this option, you don't need to find the correlation first. You can use the r-squared formula for the full set of data – **=RSQ(B4:B13,C4:C14)**.

	A	B	C	D	E	F	G
1							
2							
3		**Weekly change in AAPL**	**Weekly change in S&P 500**		R-squared is simply correlation^2		
4		1	4.05%	0.62%			
5		2	0.08%	0.54%		Correlation	
6		3	4.30%	1.22%		**0.8222**	=CORREL(B4:B13,C4:C13)
7		4	3.75%	1.47%			
8		5	1.69%	0.85%		**2 Options for finding R^2**	
9		6	2.16%	0.89%			
10		7	-1.50%	-0.33%		Option 1: Square the result from Correlation	
11		8	2.09%	0.99%		**67.60%**	=E6^2
12		9	1.29%	0.16%			
13		10	0.02%	-0.14%		Option 2: Use the R-squared formula in excel	
14						**67.60%**	=RSQ(B4:B13,C4:C13)
15							