How do I perform reverse coding in Excel?

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Reverse coding in Excel is a data transformation technique that involves reversing the scoring of items in a dataset. This is commonly used in psychological research to ensure balance and avoid response bias. To perform reverse coding in Excel, you can use the "IF" or "IFERROR" function to create a new column with the reversed scores. For example, if your original scores range from 1-5, you can use the formula "=IF(A2=1,5,IF(A2=2,4,IF(A2=3,3,IF(A2=4,2,IF(A2=5,1)))))" in a new column to reverse the scores. This will change 1 to 5, 2 to 4, 3 to 3, 4 to 2, and 5 to 1.

Perform Reverse Coding in Excel (With Example)

When creating surveys, researchers sometimes rephrase "positive" questions in a "negative" way to make sure that individuals are giving consistent responses.

We say that these types of questions are reverse-coded.

When using a survey to assign a composite score to individuals, it's important to make sure the reverse-coded questions are reverse-scored as well.

The following example shows how to reverse the scores on reverse-coded questions in Excel.

Example: Reverse Coding in Excel

Suppose researchers administer a survey with 5 questions to 10 individuals in which the possible responses to each questions are:

Strongly Agree

Agree

Neither Agree Nor Disagree

Disagree

Strongly Disagree

The following screenshot shows the results of the survey in which "Strongly Agree" is assigned a value of 5, "Agree" is assigned a value of 4, and so on:

	A	B	C	D	E	F	G
1	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**		
2	5	1	4	3	2		
3	4	2	4	4	2		
4	4	2	4	2	3		
5	5	1	5	2	2		
6	4	2	4	1	3		
7	3	3	3	2	1		
8	2	4	2	5	4		
9	1	5	4	4	5		
10	2	4	3	3	3		
11	1	5	1	2	4		
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

Suppose questions 2 and 5 are reverse coded, so we must reverse their scores.

That is:

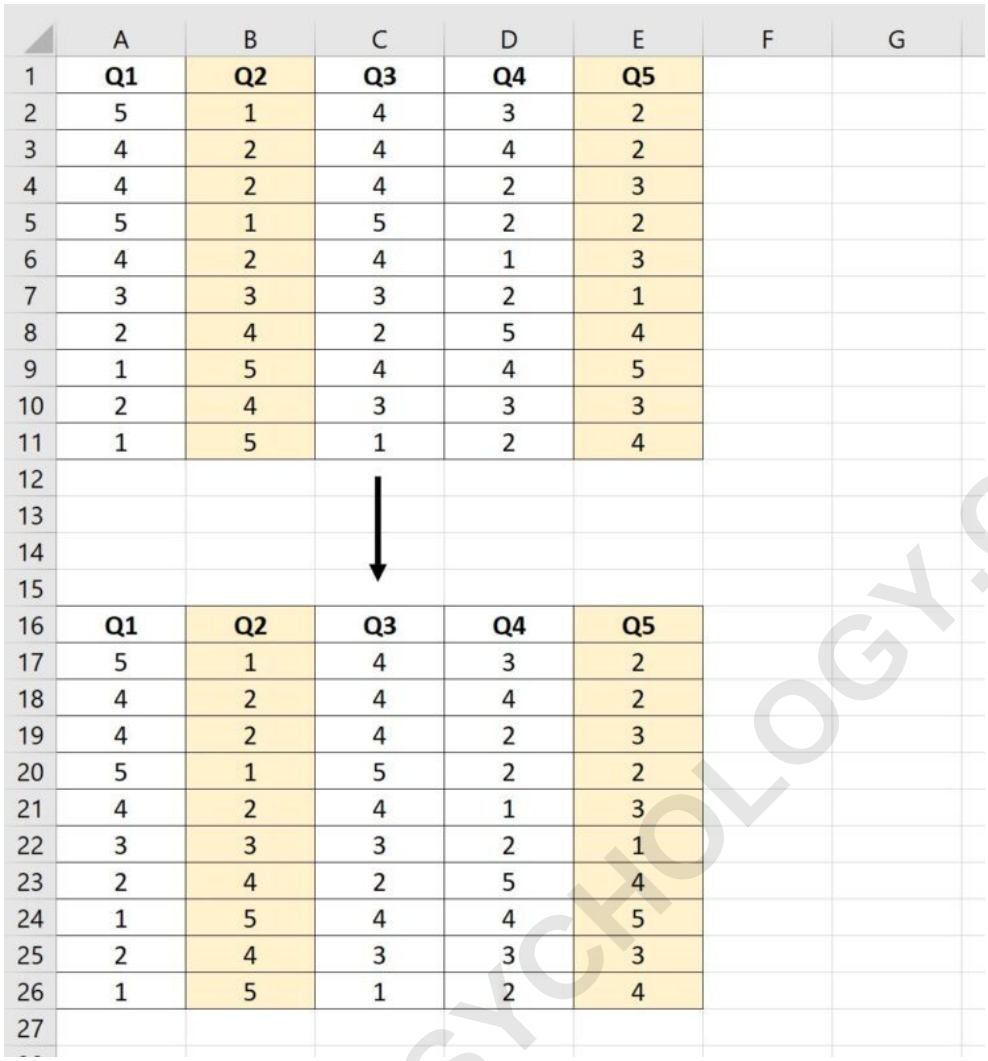
1 should become 5.
2 should become 4.
3 should become 3.
4 should become 2.
5 should become 1.

The easiest way to do this is to take the max possible score (5) and add 1 to get 6. Then subtract the original scores from 6 to get the reverse scored value.

For example:

5 becomes: 6 - 5 = 1.
4 becomes: 6 - 4 = 2.
3 becomes: 6 - 3 = 3.
2 becomes: 6 - 2 = 4.
1 becomes: 6 - 1 = 5.

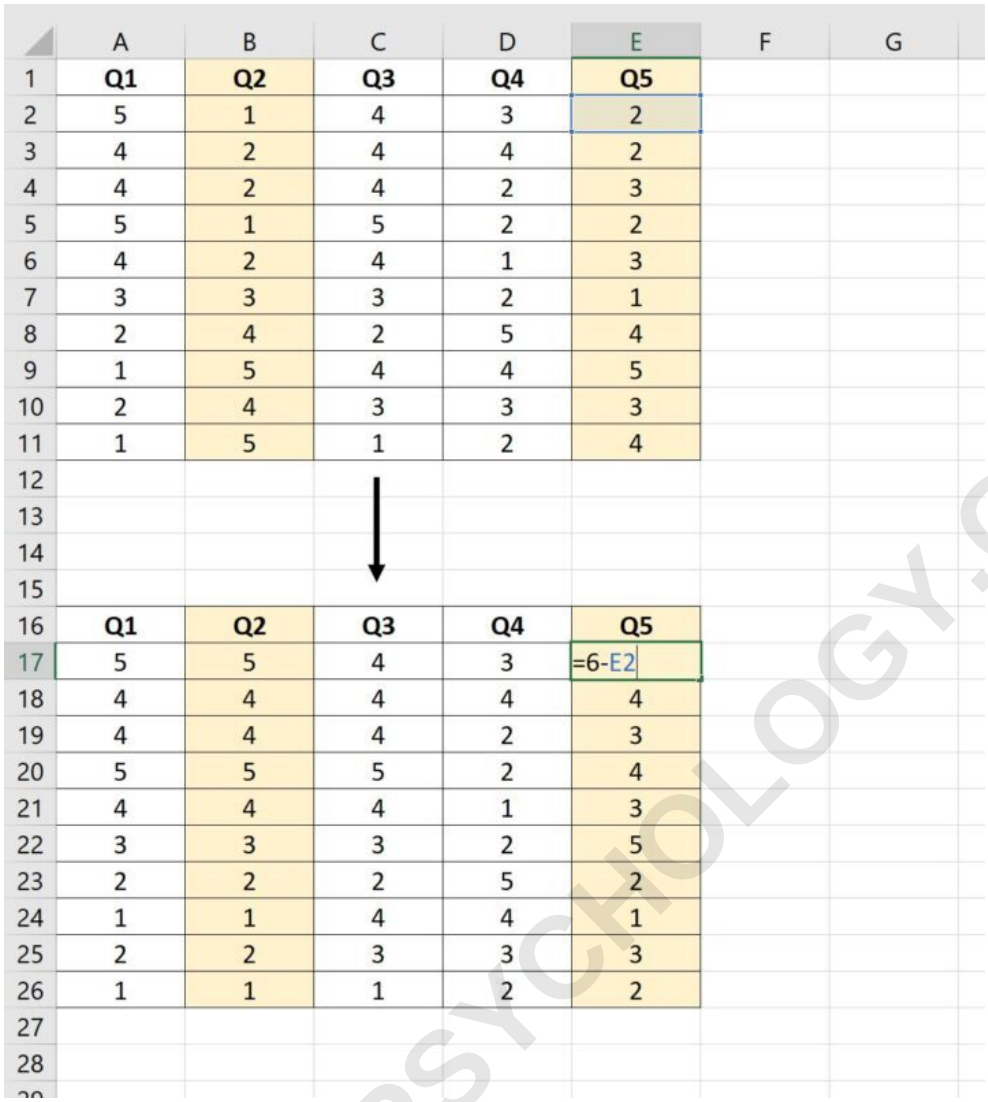
To do this in Excel, simply copy and paste all of the original answers into a new area on the spreadsheet:



	A	B	C	D	E	F	G
1	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**		
2	5	1	4	3	2		
3	4	2	4	4	2		
4	4	2	4	2	3		
5	5	1	5	2	2		
6	4	2	4	1	3		
7	3	3	3	2	1		
8	2	4	2	5	4		
9	1	5	4	4	5		
10	2	4	3	3	3		
11	1	5	1	2	4		
12							
13							
14							
15							
16	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**		
17	5	1	4	3	2		
18	4	2	4	4	2		
19	4	2	4	2	3		
20	5	1	5	2	2		
21	4	2	4	1	3		
22	3	3	3	2	1		
23	2	4	2	5	4		
24	1	5	4	4	5		
25	2	4	3	3	3		
26	1	5	1	2	4		
27							

In cell E17 type: =6-E2. Then copy and paste this formula down to all other cells in column E.

The scores in column B and column E will now both be reverse coded:



	A	B	C	D	E	F	G
1	Q1	Q2	Q3	Q4	Q5		
2	5	1	4	3	2		
3	4	2	4	4	2		
4	4	2	4	2	3		
5	5	1	5	2	2		
6	4	2	4	1	3		
7	3	3	3	2	1		
8	2	4	2	5	4		
9	1	5	4	4	5		
10	2	4	3	3	3		
11	1	5	1	2	4		
12							
13							
14							
15							
16	Q1	Q2	Q3	Q4	Q5		
17	5	5	4	3	=6-E2		
18	4	4	4	4	4		
19	4	4	4	2	3		
20	5	5	5	2	4		
21	4	4	4	1	3		
22	3	3	3	2	5		
23	2	2	2	5	2		
24	1	1	4	4	1		
25	2	2	3	3	3		
26	1	1	1	2	2		
27							
28							

Additional Resources

The following tutorials explain other commonly used terms in questionnaires and surveys: