

How can I generate a random number between a specific range using Excel?

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Generating a random number within a specific range in Excel can be done using the "RANDBETWEEN" function. This function takes two arguments, the lower and upper limit of the desired range, and returns a random integer within that range. This can be useful for creating randomized data sets or for simulating scenarios in spreadsheets. By using the "RANDBETWEEN" function, Excel can efficiently generate a random number within a specified range, eliminating the need for manual input or complex formulas.

Excel: Generate Random Number Between Range

There are two ways to generate a random number between a range in Excel:

Method 1: Use RANDBETWEEN() to Generate Random Integer in Range

=RANDBETWEEN(1, 10)

This particular formula will generate a random integer between 1 and 10.

Method 2: Use RAND() to Generate Random Number with Decimal in Range

=RANDBETWEEN(5, 14) + RAND()

This particular formula will generate a random value with decimal places between 5 and 15.

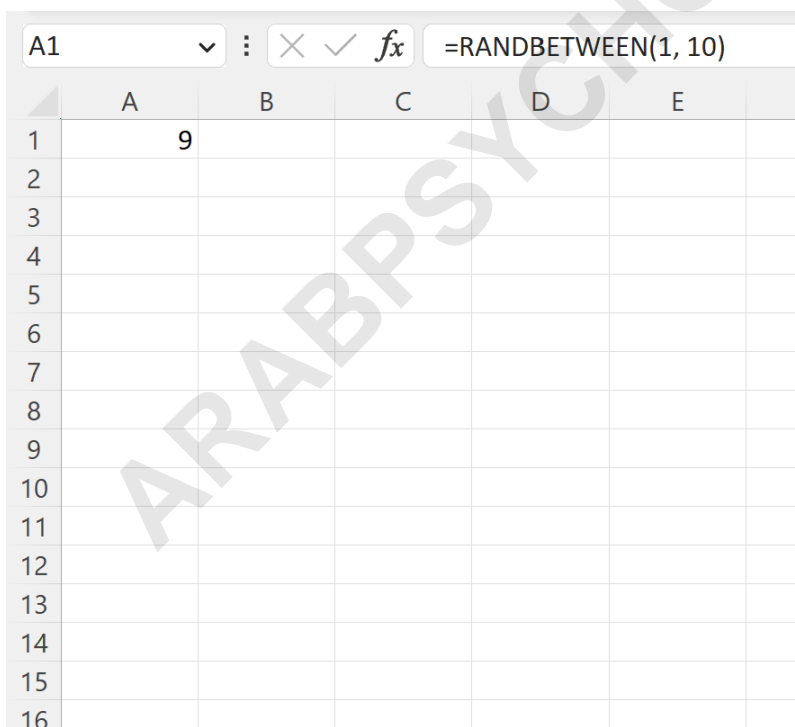
The following examples show how to use each method in practice.

Step 1: Use RANDBETWEEN() to Generate Random Integer in Range

We can use the following formula to generate a random number between 1 and 10:

=RANDBETWEEN(1, 10)

We'll type this formula into cell A1 and press Enter:



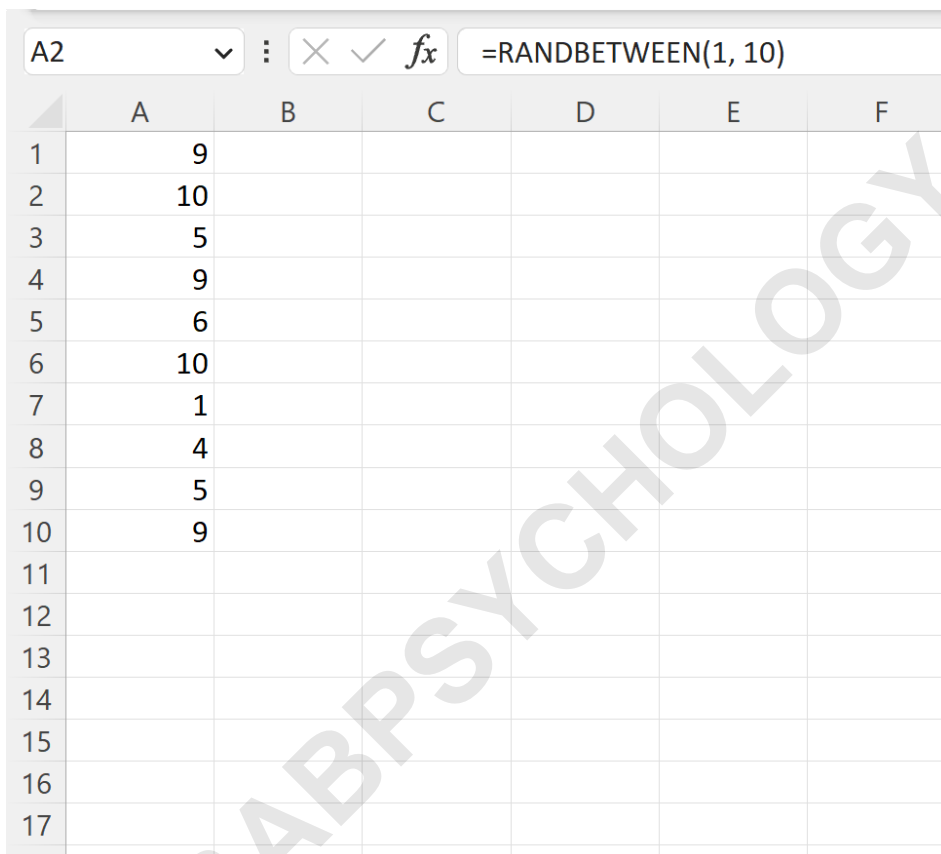
The screenshot shows an Excel spreadsheet with the formula bar at the top displaying the formula `=RANDBETWEEN(1, 10)` in cell A1. The spreadsheet grid shows columns A through E and rows 1 through 16. The value 9 is displayed in cell A1.

	A	B	C	D	E
1	9				
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

The RANDBETWEEN() function generated a random

integer of 9.

We can also click and drag this formula down to other cells in the same column to generate a list of random integers between 1 and 10:



	A	B	C	D	E	F
1	9					
2	10					
3	5					
4	9					
5	6					
6	10					
7	1					
8	4					
9	5					
10	9					
11						
12						
13						
14						
15						
16						
17						

Each of the cells in column A now contains a random integer between 1 and 10.

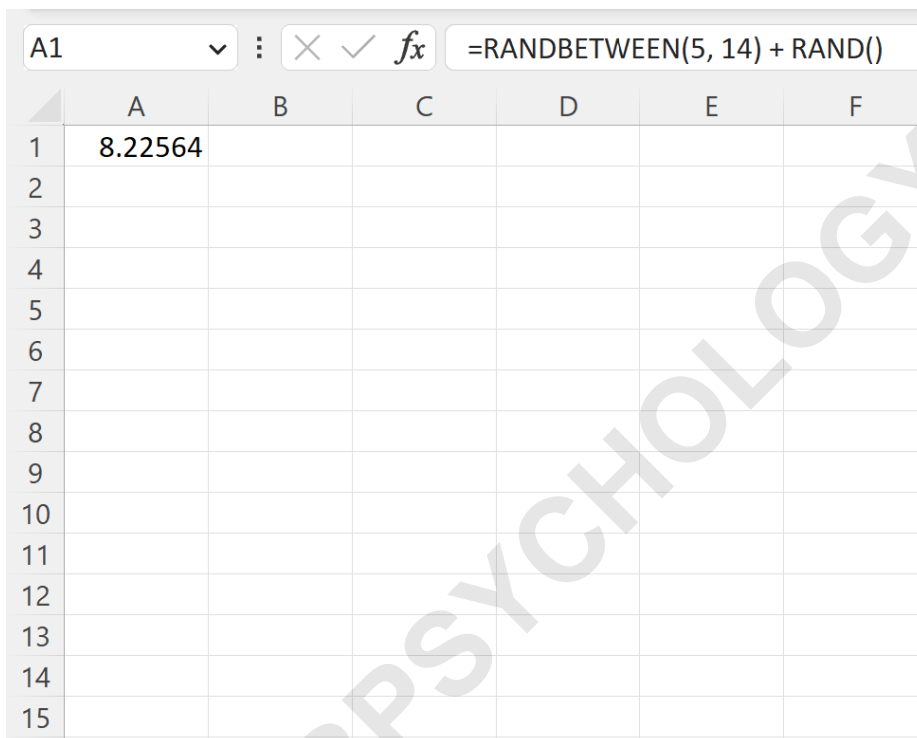
Example 2: Use RAND() to Generate Random Number with Decimal in Range

We can use the following formula to generate a random

number with decimal places between 5 and 15:

=RANDBETWEEN(5, 14) + RAND()

We'll type this formula into cell A1 and press Enter:



The screenshot shows an Excel spreadsheet with the formula bar at the top displaying the formula `=RANDBETWEEN(5, 14) + RAND()` in cell A1. The spreadsheet grid shows the value 8.22564 in cell A1. The columns are labeled A through F, and the rows are numbered 1 through 15. A large watermark 'ARABPSYCHOLOGY.COM' is visible diagonally across the spreadsheet.

	A	B	C	D	E	F
1	8.22564					
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

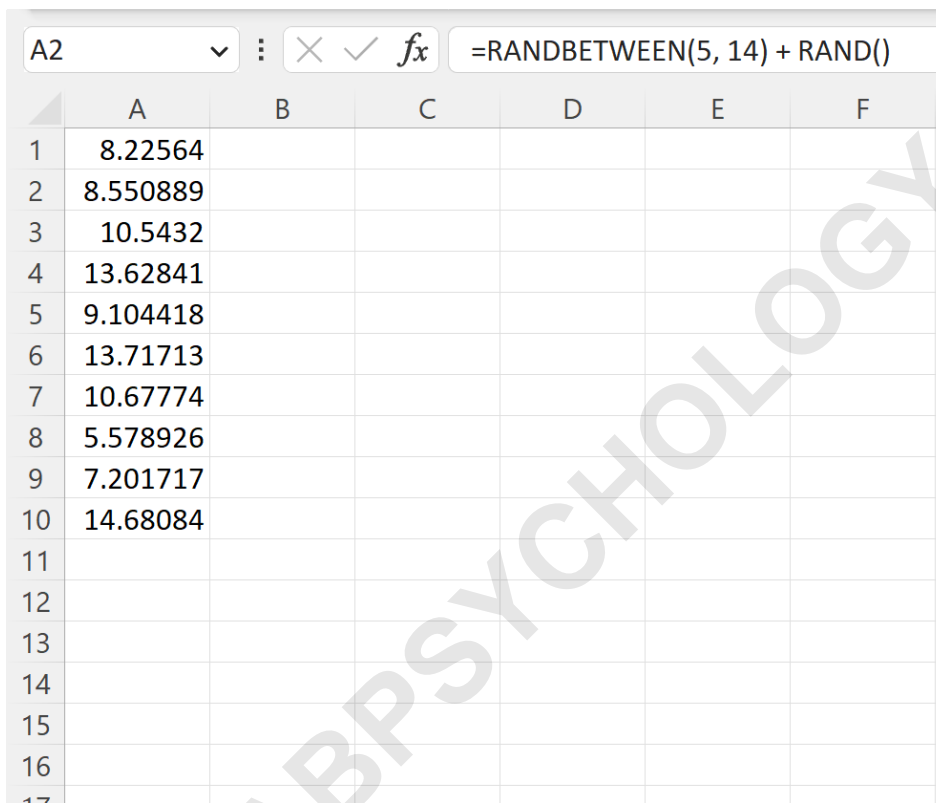
The formula generated the value 8.22564.

Here's how this formula actually works:

First, RANDBETWEEN() generates a random integer between 5 and 14. Then, RAND() generates a random decimal between 0 and 1 and adds it to the integer.

The result is a random value with a decimal between 5 and 15.

Note that we could also drag and fill this formula down to other cells in column A:



The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F
1	8.22564					
2	8.550889					
3	10.5432					
4	13.62841					
5	9.104418					
6	13.71713					
7	10.67774					
8	5.578926					
9	7.201717					
10	14.68084					
11						
12						
13						
14						
15						
16						
17						

The formula bar shows the formula: `=RANDBETWEEN(5, 14) + RAND()`

Each of the cells in column A now contains a random value with a decimal between 5 and 15.

The following tutorials explain how to perform other common tasks in Excel: