



# Computer Application

Third Stage

Lec5

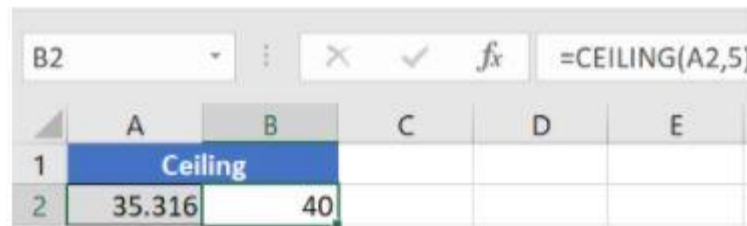
Microsoft Excel

MS.c Mortada Haider

## Excel Formulas and Functions

### 7- CEILING:

Next, we have the ceiling function. The CEILING() function rounds a number up to its nearest multiple of significance.

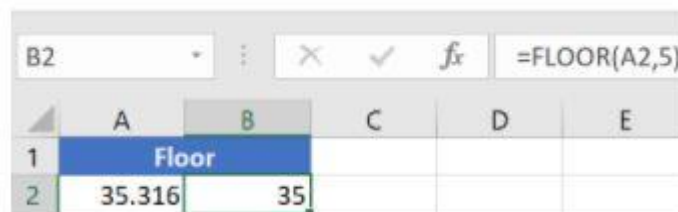


	A	B	C	D	E
1		Ceiling			
2	35.316	40			

The nearest highest multiple of 5 for 35.316 is 40.

### 8- FLOOR:

Contrary to the Ceiling function, the floor function rounds a number down to the nearest multiple of significance.



	A	B	C	D	E
1		Floor			
2	35.316	35			

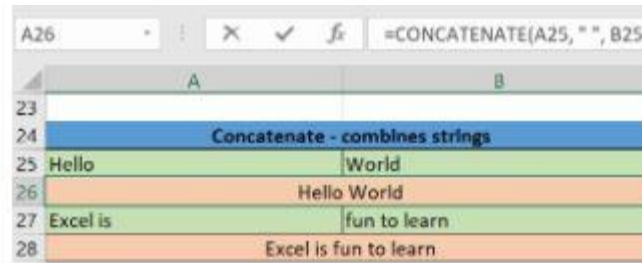
The nearest lowest multiple of 5 for 35.316 is 35.

### 9- CONCATENATE:

This function merges or joins several text strings into one text string. Given below are the different ways to perform this function.

In this example, we have operated with the syntax:

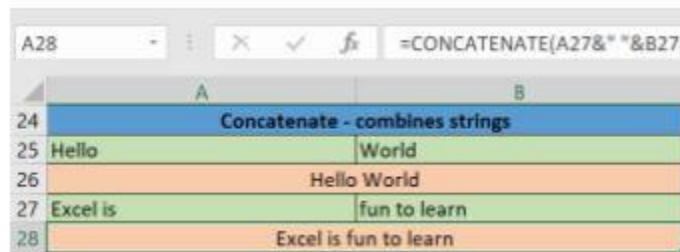
CONCATENATE =CONCATENATE(A25, " ", B25)



	A	B
23		
24	Concatenate - combines strings	
25	Hello	World
26	Hello World	
27	Excel is	fun to learn
28	Excel is fun to learn	

In this example, we have operated with the syntax:

**"=CONCATENATE(A27&" "&B27)"**

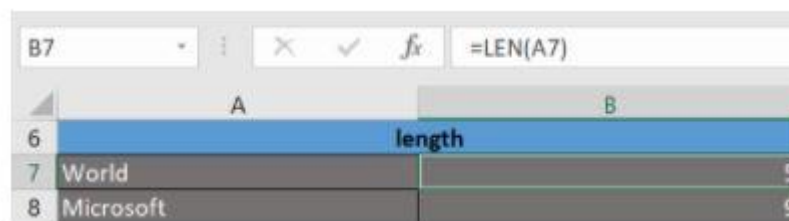


	A	B
24	Concatenate - combines strings	
25	Hello	World
26	Hello World	
27	Excel is	fun to learn
28	Excel is fun to learn	

Those were the two ways to implement the concatenation operation in Excel.

#### 10- LEN:

The function LEN() returns the total number of characters in a string. So, it will count the overall characters, including spaces and special characters. Given below is an example of the Len function.



	A	B
6	length	
7	World	5
8	Microsoft	9

#### 11- REPLACE:

As the name suggests, the REPLACE() function works on replacing the part of a text string with a different text string.

The syntax is “=REPLACE(old\_text, start\_num, num\_chars, new\_text)”. Here, start\_num refers to the index position you want to start replacing the characters with. Next, num\_chars indicate the number of characters you want to replace.

Let's have a look at the ways we can use this function.

- Here, we are replacing A101 with B101 by typing

**REPLACE =REPLACE(A15,1,1,"B")**

	A	B
14		Replace
15	A101	B101
16	A102	A2102
17	Adam	Saam

- Next, we are replacing A102 with A2102 by typing:

**"=REPLACE(A16,1,1, "A2")"**

	A	B
14		Replace
15	A101	B101
16	A102	A2102
17	Adam	Saam

- Finally, we are replacing Adam with Saam by typing:

**"=REPLACE(A17,1,2, "Sa")"**

	A	B
14		Replace
15	A101	B101
16	A102	A2102
17	Adam	Saam

## 12- SUBSTITUTE:

The SUBSTITUTE() function replaces the existing text with a new text in a text string.

The syntax is **"=SUBSTITUTE(text, old\_text, new\_text, [instance\_num])"**.

Here, [instance\_num] refers to the index position of the present texts more than once.

Given below are a few examples of this function:

- Here, we are substituting "I like" with "He likes" by typing:

`"=SUBSTITUTE(A20, "I like", "He likes")"`

The screenshot shows an Excel spreadsheet with columns A and B. Row 19 is the header row with the title 'Substitute'. Row 20 shows the result of the formula in B20. Row 21 shows the original text in A21. Row 22 shows the result of the formula in B22.

	A	B
19	Substitute	
20	I like Excel	He likes Excel
21	MS Excel 2010, MS Word 2010	MS Excel 2010, MS Word 2016
22	MS Excel 2010, MS Word 2010	MS Excel 2016, MS Word 2016

- Next, we are substituting the second 2010 that occurs in the original text in cell A21 with 2016 by typing :

`"=SUBSTITUTE(A21,2010, 2016,2)"`

The screenshot shows an Excel spreadsheet with columns A and B. Row 19 is the header row with the title 'Substitute'. Row 20 shows the result of the formula in B20. Row 21 shows the result of the formula in B21. Row 22 shows the result of the formula in B22.

	A	B
19	Substitute	
20	I like Excel	He likes Excel
21	MS Excel 2010, MS Word 2010	MS Excel 2010, MS Word 2016
22	MS Excel 2010, MS Word 2010	MS Excel 2016, MS Word 2016

- Now, we are replacing both the 2010s in the original text with 2016 by typing:

`"=SUBSTITUTE(A22,2010,2016)"`.

The screenshot shows an Excel spreadsheet with columns A and B. Row 19 is the header row with the title 'Substitute'. Row 20 shows the result of the formula in B20. Row 21 shows the result of the formula in B21. Row 22 shows the result of the formula in B22.

	A	B
19	Substitute	
20	I like Excel	He likes Excel
21	MS Excel 2010, MS Word 2010	MS Excel 2010, MS Word 2016
22	MS Excel 2010, MS Word 2010	MS Excel 2016, MS Word 2016