

How can I create and use variables in Google Sheets?

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Creating and using variables in Google Sheets allows users to store and manipulate data in a spreadsheet. To create a variable, users can simply select a cell and assign a value or formula to it. This variable can then be used in other cells or formulas by referencing its designated cell. Variables can be helpful in automating calculations and can also be used in conditional formatting to make changes to a spreadsheet based on the value of the variable. By utilizing variables, users can efficiently manage and organize data in their Google Sheets.

Create and Use Variables in Google Sheets

The easiest way to create variables that you can reference in formulas in Google Sheets is to use the Name box to give custom names to cells.

The following example shows how to do so in practice.

Example: Create and Use Variables in Google Sheets

Suppose we have the following information about the number of units sold, the unit price, and the unit cost for some store:

	A	B	C	D
1	Units Sold	20		
2	Unit Price	5		
3	Unit Cost	2		
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

To calculate the total revenue for this store, we can use the following formula:

$$\text{Total Revenue} = \text{Units Sold} * (\text{Unit Price} - \text{Unit Cost})$$

We could type the following formula into cell B4 to calculate this value:

$$=B1*(B2-B3)$$

The following screenshot shows how to use this

formula:

	A	B	C	D
1	Units Sold	20		
2	Unit Price	5		
3	Unit Cost	2		
4	Total Revenue	60		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

From the output we can see that the total revenue is \$60.

However, we could also create variable names for the cells and then use the variable names in the formula to calculate the total revenue.

To do so, click on cell B1. Then click the Name box in

the top left corner:

	A	B	C	D
1	Units Sold	20		
2	Unit Price	5		
3	Unit Cost	2		
4	Total Revenue	60		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				

Then type any custom name you'd like.

For this example, we'll type `units_sold` and then press Enter:

	A	B	C	D
1	Units Sold	20		
2	Unit Price	5		
3	Unit Cost	2		
4	Total Revenue	60		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				

We'll repeat this process with cell B2 and B3, using the names `unit_price` and `unit_cost` as the variable names.

Now we can type the following formula into cell B4 to calculate the total revenue, using only the variable names in the formula:

```
=units_sold*(unit_price-unit_cost)
```

The following screenshot shows how to use this formula:

B4 \downarrow *fx* =units_sold*(unit_price-unit_cost)

	A	B	C	D
1	Units Sold	20		
2	Unit Price	5		
3	Unit Cost	2		
4	Total Revenue	60		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				

From the output we can see that the total revenue is \$60.

This matches the value that we calculated earlier using the cell references in the formula.

Note that in this scenario we used a simple formula that only involved three variables, but in practice you can give custom names to as many cells as you'd like so that you can use as many variable names in a formula that you need.

Also note that the variable names we defined on one sheet can be used in a different sheet within the same Google Sheets workbook.

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

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