

7.9: Simple Math

Learning Objectives

- Complete simple math functions in Excel

Excel spreadsheets are often used for calculating numbers with simple math. There are a few things to learn to set up using simple math calculations in Excel. You've already learned about the SUM function. This next section will teach other simple math steps to use in spreadsheets.

The basic math calculation steps in Excel are set up with the background of first quarter sales numbers for a department store. The example table includes the product type, sales price, number of items sold and the total for each item. Start by figuring out the total sales for each product type for the quarter.

Multiplication

- Total sales for each product requires the multiplication of sales price and number sold.
- Select the cell in Q1 total sales column and type in = **Price Cell * Number Cell**.
- Press the keyboard **Enter** key and the total is calculated.
- Type the same formula in for each cell or use the flash fill way by dragging the bottom right corner down the entire column and it will fill with the total sales for each product.

	A	B	C	D
1	Product	Price	Number	Q1 Total Sales
2	Coffee maker	\$ 25	50	=B2*C2
3	Waffle Iron	\$ 25	39	
4	Frying Pan	\$ 12	78	
5	Plate Set	\$ 30	60	
6	Knife Set	\$ 55	45	
7	Cookie Sheet	\$ 10	100	
8	Cake Pan	\$ 10	88	
9	Hand Mixer	\$ 25	33	
10	Tea Kettle	\$ 20	22	
11	Glass Pitcher	\$ 15	63	
12	Juicer	\$ 32	15	
13	Toaster	\$ 35	48	
14	Microwave	\$ 100	39	
15	Skillet	\$ 30	51	

Practice Question

<https://assessments.lumenlearning.co...essments/18646>

Addition

- To find total sales for just small appliances, add their sales totals together by using the plus sign.
- Select the cell under total the **Sm Appliances** and type in = **Q1 Total Sales Cell Reference for Product1 + Q1 Total Sales Cell Reference for Product2 + Q1 Total Sales Cell Reference for Product3 + Q1 Total Sales Cell Reference for Product4 , etc.** (for this example, the Microwave is not a small appliance).
- Press the keyboard **Enter** key.
- Total sales for all small appliance sales is displayed.
- Another way to write this addition formula is by using brackets =**SUM(D2+D3+D9+D12+D13)**.

IF						
A	B	C	D	E	F	G
1	Product	Price	Number	Q1 Total Sales	Sm Appliances	
2	Coffee maker	\$ 25	50	\$ 1,250	=D2+D3+D9+D12+D13	
3	Waffle Iron	\$ 25	39	\$ 975		
4	Frying Pan	\$ 12	78	\$ 936		
5	Plate Set	\$ 30	60	\$ 1,800		
6	Knife Set	\$ 55	45	\$ 2,475		
7	Cookie Sheet	\$ 10	100	\$ 1,000		
8	Cake Pan	\$ 10	88	\$ 880		
9	Hand Mixer	\$ 25	33	\$ 825		
10	Tea Kettle	\$ 20	22	\$ 440		
11	Glass Pitcher	\$ 15	63	\$ 945		
12	Juicer	\$ 32	15	\$ 480		
13	Toaster	\$ 35	48	\$ 1,680		
14	Microwave	\$ 100	39	\$ 3,900		
15	Skillet	\$ 30	51	\$ 1,530		

F5						
A	B	C	D	E	F	
1	Product	Price	Number	Q1 Total Sales	Sm Appliances	
2	Coffee maker	\$ 25	50	\$ 1,250	\$ 5,210	
3	Waffle Iron	\$ 25	39	\$ 975		
4	Frying Pan	\$ 12	78	\$ 936		
5	Plate Set	\$ 30	60	\$ 1,800		
6	Knife Set	\$ 55	45	\$ 2,475		
7	Cookie Sheet	\$ 10	100	\$ 1,000		
8	Cake Pan	\$ 10	88	\$ 880		
9	Hand Mixer	\$ 25	33	\$ 825		
10	Tea Kettle	\$ 20	22	\$ 440		
11	Glass Pitcher	\$ 15	63	\$ 945		
12	Juicer	\$ 32	15	\$ 480		
13	Toaster	\$ 35	48	\$ 1,680		
14	Microwave	\$ 100	39	\$ 3,900		
15	Skillet	\$ 30	51	\$ 1,530		
16						

Subtraction

- For the total sales for all products, except small appliances, subtract the grand total from the small appliance total using the subtraction sign.
- Select the cell under total the **Non-Appliance** and type in = **Grand Totals Sales Cell Reference – Sm Appliance total**.
- Press the keyboard Enter key.
- Total sales for all products minus small appliances are displayed.
- Another way to write this subtraction formula is =SUM(D16-F2).

F2						
A	B	C	D	E	F	
1	Product	Price	Number	Q1 Total Sales	Sm Appliances	
2	Coffee maker	\$ 25	50	\$ 1,250	\$ 5,210	
3	Waffle Iron	\$ 25	39	\$ 975		
4	Frying Pan	\$ 12	78	\$ 936		
5	Plate Set	\$ 30	60	\$ 1,800		
6	Knife Set	\$ 55	45	\$ 2,475		
7	Cookie Sheet	\$ 10	100	\$ 1,000		
8	Cake Pan	\$ 10	88	\$ 880		
9	Hand Mixer	\$ 25	33	\$ 825		
10	Tea Kettle	\$ 20	22	\$ 440		
11	Glass Pitcher	\$ 15	63	\$ 945		
12	Juicer	\$ 32	15	\$ 480		
13	Toaster	\$ 35	48	\$ 1,680		
14	Microwave	\$ 100	39	\$ 3,900		
15	Skillet	\$ 30	51	\$ 1,530		
16				\$ 19,116		

F7						
A	B	C	D	E	F	
1	Product	Price	Number	Q1 Total Sales	Sm Appliances	
2	Coffee maker	\$ 25	50	\$ 1,250	\$ 5,210	
3	Waffle Iron	\$ 25	39	\$ 975		
4	Frying Pan	\$ 12	78	\$ 936		
5	Plate Set	\$ 30	60	\$ 1,800		
6	Knife Set	\$ 55	45	\$ 2,475		
7	Cookie Sheet	\$ 10	100	\$ 1,000		
8	Cake Pan	\$ 10	88	\$ 880		
9	Hand Mixer	\$ 25	33	\$ 825		
10	Tea Kettle	\$ 20	22	\$ 440		
11	Glass Pitcher	\$ 15	63	\$ 945		
12	Juicer	\$ 32	15	\$ 480		
13	Toaster	\$ 35	48	\$ 1,680		
14	Microwave	\$ 100	39	\$ 3,900		
15	Skillet	\$ 30	51	\$ 1,530		
16				\$ 19,116		

Division

- Maybe you need to know what the average unit sale would be across all products for the first quarter. In that case, divide the grand total sales by the number of units sold using the division sign
- Select the cell under **Average Unit Sales** title and type in = **Grand Totals Sales Cell Reference / Number**.
- Press the keyboard **Enter** key.
- You will now see what the average product sale was for Q1.
- Another way to write this division/average formula is =SUM(D16/C16).

C16					
=D16/C16					
Product	Price	Number	Q1 Total Sales		Sm Appliances
Coffee maker	\$ 25	50	\$ 1,250		\$ 5,210
Waffle Iron	\$ 25	39	\$ 975		
Frying Pan	\$ 12	78	\$ 936		
Plate Set	\$ 30	60	\$ 1,800		Non Appliance
Knife Set	\$ 55	45	\$ 2,475		\$ 13,906
Cookie Sheet	\$ 10	100	\$ 1,000		
Cake Pan	\$ 10	88	\$ 880		
Hand Mixer	\$ 25	33	\$ 825		Average Unit Sales
Tea Kettle	\$ 20	22	\$ 440		=D16/C16
Glass Pitcher	\$ 15	63	\$ 945		
Juicer	\$ 32	15	\$ 480		
Toaster	\$ 35	48	\$ 1,680		
Microwave	\$ 100	39	\$ 3,900		
Skillet	\$ 30	51	\$ 1,530		
Grand Totals		731	\$ 19,116		

F10					
=D16/C16					
Product	Price	Number	Q1 Total Sales		Sm Appliances
Coffee maker	\$ 25	50	\$ 1,250		\$ 5,210
Waffle Iron	\$ 25	39	\$ 975		
Frying Pan	\$ 12	78	\$ 936		
Plate Set	\$ 30	60	\$ 1,800		Non Appliance
Knife Set	\$ 55	45	\$ 2,475		\$ 13,906
Cookie Sheet	\$ 10	100	\$ 1,000		
Cake Pan	\$ 10	88	\$ 880		
Hand Mixer	\$ 25	33	\$ 825		Average Unit Sales
Tea Kettle	\$ 20	22	\$ 440		\$ 26.15
Glass Pitcher	\$ 15	63	\$ 945		
Juicer	\$ 32	15	\$ 480		
Toaster	\$ 35	48	\$ 1,680		
Microwave	\$ 100	39	\$ 3,900		
Skillet	\$ 30	51	\$ 1,530		
Grand Totals		731	\$ 19,116		

Practice Question

<https://assessments.lumenlearning.co...essments/18647>

Percentage

- To find what the percentage of sales for small appliances out of total sales was, divide the total small appliance sales by the grand total sales using the division sign.
- Select the cell under **Appliance Percentage** title and type in = Sm Appliances / Grand Totals Sales Cell Reference.
- Press the keyboard **Enter** key.
- The average product sale was for Q1 displays as a decimal point.
- Another way to write this percentage formula is =SUM(F2/D16).

IF					
=F2/D16					
Product	Price	Number	Q1 Total Sales		Sm Appliances
Coffee maker	\$ 25	50	\$ 1,250		\$ 5,210
Waffle Iron	\$ 25	39	\$ 975		
Frying Pan	\$ 12	78	\$ 936		
Plate Set	\$ 30	60	\$ 1,800		Non Appliance
Knife Set	\$ 55	45	\$ 2,475		\$ 13,906
Cookie Sheet	\$ 10	100	\$ 1,000		
Cake Pan	\$ 10	88	\$ 880		
Hand Mixer	\$ 25	33	\$ 825		Average Unit Sales
Tea Kettle	\$ 20	22	\$ 440		\$ 26.15
Glass Pitcher	\$ 15	63	\$ 945		
Juicer	\$ 32	15	\$ 480		Appliance Percentage
Toaster	\$ 35	48	\$ 1,680		=F2/D16
Microwave	\$ 100	39	\$ 3,900		
Skillet	\$ 30	51	\$ 1,530		
Grand Totals		731	\$ 19,116		

F14					
=F2/D16					
Product	Price	Number	Q1 Total Sales		Sm Appliances
Coffee maker	\$ 25	50	\$ 1,250		\$ 5,210
Waffle Iron	\$ 25	39	\$ 975		
Frying Pan	\$ 12	78	\$ 936		
Plate Set	\$ 30	60	\$ 1,800		Non Appliance
Knife Set	\$ 55	45	\$ 2,475		\$ 13,906
Cookie Sheet	\$ 10	100	\$ 1,000		
Cake Pan	\$ 10	88	\$ 880		
Hand Mixer	\$ 25	33	\$ 825		Average Unit Sales
Tea Kettle	\$ 20	22	\$ 440		\$ 26.15
Glass Pitcher	\$ 15	63	\$ 945		
Juicer	\$ 32	15	\$ 480		Appliance Percentage
Toaster	\$ 35	48	\$ 1,680		0.272546558
Microwave	\$ 100	39	\$ 3,900		
Skillet	\$ 30	51	\$ 1,530		
Grand Totals		731	\$ 19,116		

To have the results display as a percentage, click the % button on the **Home** tab in the **Number** group.

File Home Insert Page Layout Formulas Data Review View Developer Help Power Pivot										
Clipboard		Font			Alignment			Number		
Paste		Calibri 11 A ⁺ A ⁻ B I U A			Merge & Center			General \$ 0 .00		
F13 : X f_x =F2/D16										
	A	B	C	D	E	F	G	H	I	J
1	Product	Price	Number	Q1 Total Sales		Sm Appliances				
2	Coffee maker	\$ 25	50	\$ 1,250		\$ 5,210				
3	Waffle Iron	\$ 25	39	\$ 975						
4	Frying Pan	\$ 12	78	\$ 936						
5	Plate Set	\$ 30	60	\$ 1,800		Non Appliance				
6	Knife Set	\$ 55	45	\$ 2,475		\$ 13,906				
7	Cookie Sheet	\$ 10	100	\$ 1,000						
8	Cake Pan	\$ 10	88	\$ 880						
9	Hand Mixer	\$ 25	33	\$ 825		Average Unit Sales				
10	Tea Kettle	\$ 20	22	\$ 440		\$ 26.15				
11	Glass Pitcher	\$ 15	63	\$ 945						
12	Juicer	\$ 32	15	\$ 480		Appliance Percentage				
13	Toaster	\$ 35	48	\$ 1,680		27%				
14	Microwave	\$ 100	39	\$ 3,900						
15	Skillet	\$ 30	51	\$ 1,530						
16	Grand Totals		731	\$ 19,116						

Note

More than one calculation can be included in a single cell's formula. For example, you want to know the total sales of a few specific items for Q1; coffee maker, tea kettle and microwave.

If the Q1 totals hadn't been calculated yet, you'd need to multiply the number and sales price of each item then add up the total. This can be written in one formula by placing a comma between calculations. It is calculated like this =SUM(B2*C2,B10*C10,B14*C14).

Contributors and Attributions

CC licensed content, Original

- Simple Math. **Authored by:** Sherri Pendleton. **Provided by:** Lumen Learning. **License:** [CC BY: Attribution](#)

7.9: Simple Math is shared under a [CC BY](#) license and was authored, remixed, and/or curated by LibreTexts.