8 Commonly Used Formulas To Get You Started

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8 Commonly Used Formulas to Get You Started

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Let's start with a story...

"Sure, I know Excel." That's what Anthony said in the interview for his new role And he wasn't lying, either. He worked with it every day, and even enjoyed some of the work he did. There's so much that the program could do though, he felt like he'd only scratched the surface.

And boy was he right. For this new role, he's spending as much time analyzing sales data as he did making sales! This is a lot more than the data entry he did before. The new responsibilities were one of the appealing things about this move, and he had banked on managing people. Worksheets? Not so much.

Every time his new boss asks for new information in the spreadsheet, Anthony knows he's got an evening of Google in front of him. And one day, he's certain his boss will want same-day turnaround, but right now he's spending a lot of time doing the math and copying answers into the spreadsheet.

There has to be a better way to do this. He's got so much to do; he doesn't have the time that he's already spending on Excel spreadsheets – let alone any more. If he felt like it was valuable, it'd be a different thing, but he's a smart guy and working with Excel makes him feel stupid.

His boss happened to be looking over his shoulder one day when he made a change to the spreadsheet, and she seemed confused. "Why didn't your total change?"

What did she mean? "I haven't gone in and changed it yet."

"The formula should change automatically."

When he asked what she meant, she finally understood. He explained he'd been using his calculator to figure out the totals and averages, and she smiled. "Put a meeting on my calendar," she said. "I'm going to make your life way easier."

Anthony set the meeting as soon as he could – later that day.
He came in with a list of struggles and questions, the first of which was, "so what's a formula?"

She happily took him through what she knew, and showed him where to find more information. Using examples from his spreadsheet, she walked through the formulas that would shave hours off his total Excel time.

"Wow." Anthony never thought he'd find himself smiling about Excel.
In fact, he'd imagined that his boss would yell at him if she ever found out how little he knew.

But she understood. "Excel is hard. Give it some time, and before long you'll be an expert."

This is what she taught him in that meeting:

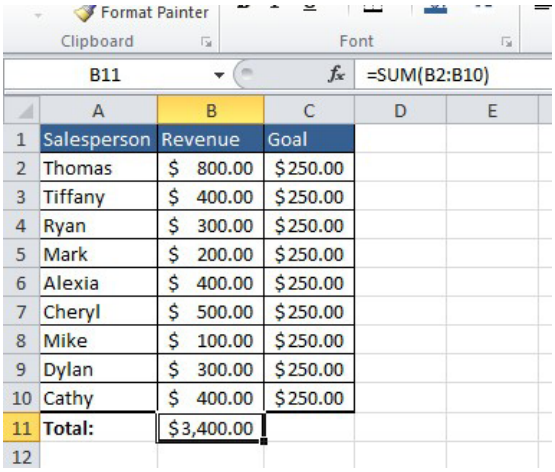
Formulas and functions allow you to calculate, analysis and interpret your data. There are hundreds of formulas and some get very specific to a given task for function.

Formulas and functions allow you to calculate,
analysis and interpret your data.
There are hundreds of formulas and some get
very specific to a given task for function.

Formula 1: SUM

Used to find the total in a given range. To find the sum of an area you would enter: =SUM(range)

➢ Let's say you wanted to find the total sales in the table below. Select the cell and enter: **=SUM(B2:B10)**

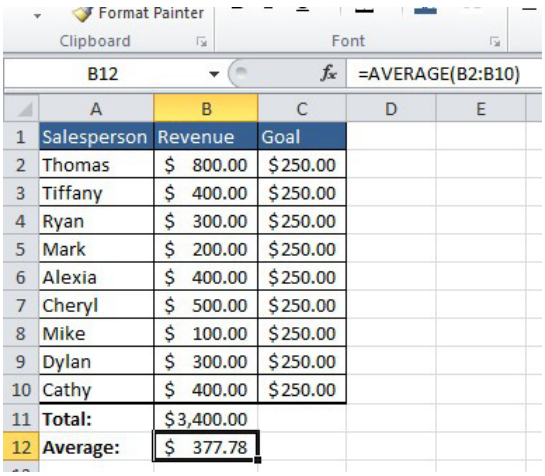


	A	B	C	D	E
1	Salesperson	Revenue	Goal		
2	Thomas	$ 800.00	$250.00		
3	Tiffany	$ 400.00	$250.00		
4	Ryan	$ 300.00	$250.00		
5	Mark	$ 200.00	$250.00		
6	Alexia	$ 400.00	$250.00		
7	Cheryl	$ 500.00	$250.00		
8	Mike	$ 100.00	$250.00		
9	Dylan	$ 300.00	$250.00		
10	Cathy	$ 400.00	$250.00		
11	**Total:**	$3,400.00			
12					

Formula 2: AVERAGE

Used to find the average of a given range: =AVERAGE(range)

➢ Let's say you wanted to find the average sale amount in the table below. You would enter: **=AVERAGE(B2:B10)**

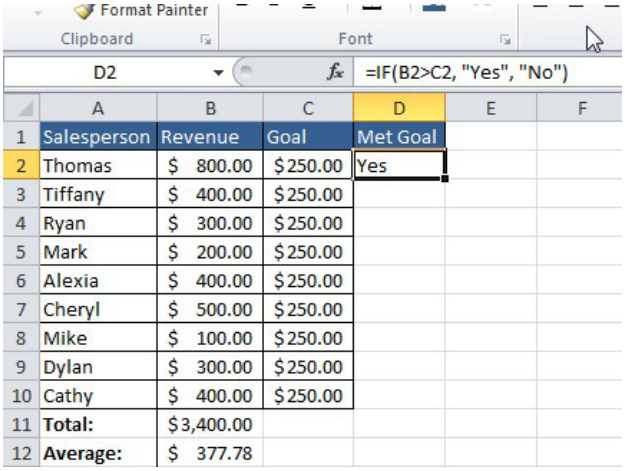


	A	B	C	D	E
1	Salesperson	Revenue	Goal		
2	Thomas	$ 800.00	$250.00		
3	Tiffany	$ 400.00	$250.00		
4	Ryan	$ 300.00	$250.00		
5	Mark	$ 200.00	$250.00		
6	Alexia	$ 400.00	$250.00		
7	Cheryl	$ 500.00	$250.00		
8	Mike	$ 100.00	$250.00		
9	Dylan	$ 300.00	$250.00		
10	Cathy	$ 400.00	$250.00		
11	**Total:**	$3,400.00			
12	**Average:**	$ 377.78			

Formula 3: IF

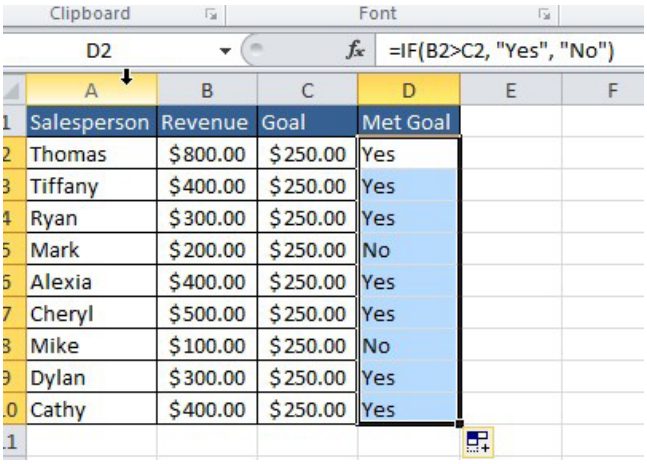
The IF function is a logical function that allows you to set criteria so that Excel will return one value if the conditions met are true and another value if the conditions are false. =IF(logical_statement, return this if logical statement is true, return this if logical statement is false)

➢ Let's say you wanted to find whether or not the revenue for each salesperson below met goal or was under goal:
Starting in cell D2, you would enter: **=IF(B2>C2, "Yes", "No")**



	A	B	C	D	E	F
1	Salesperson	Revenue	Goal	Met Goal		
2	Thomas	$ 800.00	$250.00	Yes		
3	Tiffany	$ 400.00	$250.00			
4	Ryan	$ 300.00	$250.00			
5	Mark	$ 200.00	$250.00			
6	Alexia	$ 400.00	$250.00			
7	Cheryl	$ 500.00	$250.00			
8	Mike	$ 100.00	$250.00			
9	Dylan	$ 300.00	$250.00			
10	Cathy	$ 400.00	$250.00			
11	**Total:**	$3,400.00				
12	**Average:**	$ 377.78				

➢ Once you have the formula entered for the first row, you can copy it down the column to find the answer for each row:



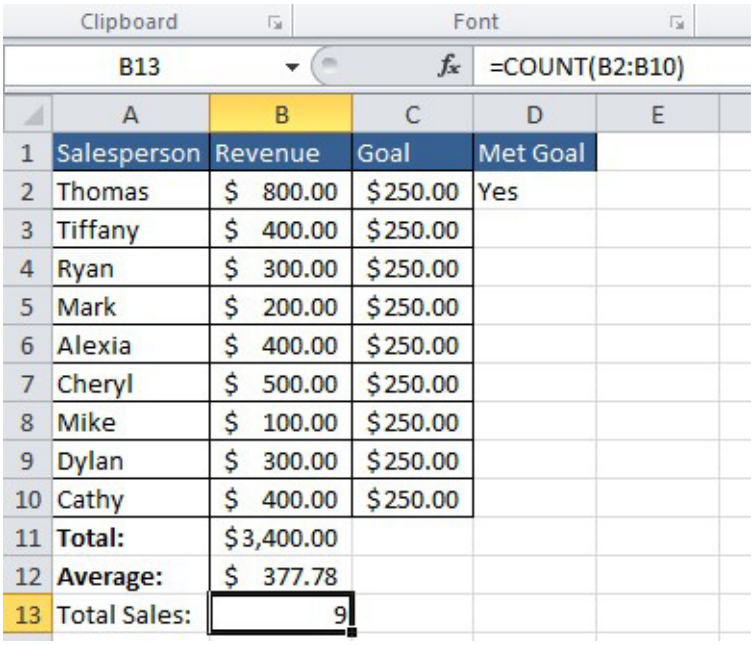
	A	B	C	D	E	F
1	Salesperson	Revenue	Goal	Met Goal		
2	Thomas	$800.00	$250.00	Yes		
3	Tiffany	$400.00	$250.00	Yes		
4	Ryan	$300.00	$250.00	Yes		
5	Mark	$200.00	$250.00	No		
6	Alexia	$400.00	$250.00	Yes		
7	Cheryl	$500.00	$250.00	Yes		
8	Mike	$100.00	$250.00	No		
9	Dylan	$300.00	$250.00	Yes		
10	Cathy	$400.00	$250.00	Yes		
11						

➢ Note that the formula automatically adjusts so it refers to the row it falls into. This is called a relative reference.

Formula 4: COUNT

This function allows you to count the total number of cells that contain data.
=COUNT(Range)

➢ Let's say you wanted to find the total number of sales, you would enter: **=COUNT(B2:B10)**



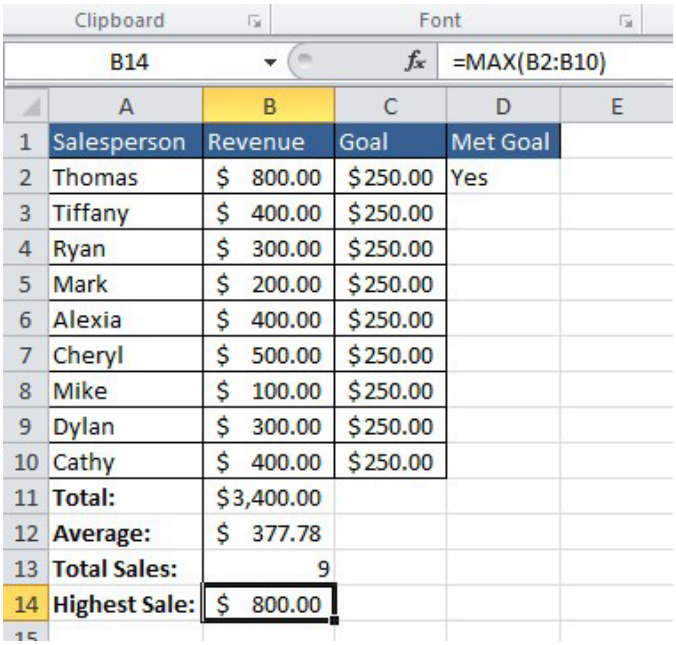
	A	B	C	D	E
1	Salesperson	Revenue	Goal	Met Goal	
2	Thomas	$ 800.00	$250.00	Yes	
3	Tiffany	$ 400.00	$250.00		
4	Ryan	$ 300.00	$250.00		
5	Mark	$ 200.00	$250.00		
6	Alexia	$ 400.00	$250.00		
7	Cheryl	$ 500.00	$250.00		
8	Mike	$ 100.00	$250.00		
9	Dylan	$ 300.00	$250.00		
10	Cathy	$ 400.00	$250.00		
11	**Total:**	$3,400.00			
12	**Average:**	$ 377.78			
13	Total Sales:	9			

➢ You now know the total sales for that period.

Formula 5: MAX

This function allows you to find the highest number in a given range.
=MAX(Range)

➢ Let's say you want to find the highest sales in our table.
You would enter: **=MAX(B2:B10)**

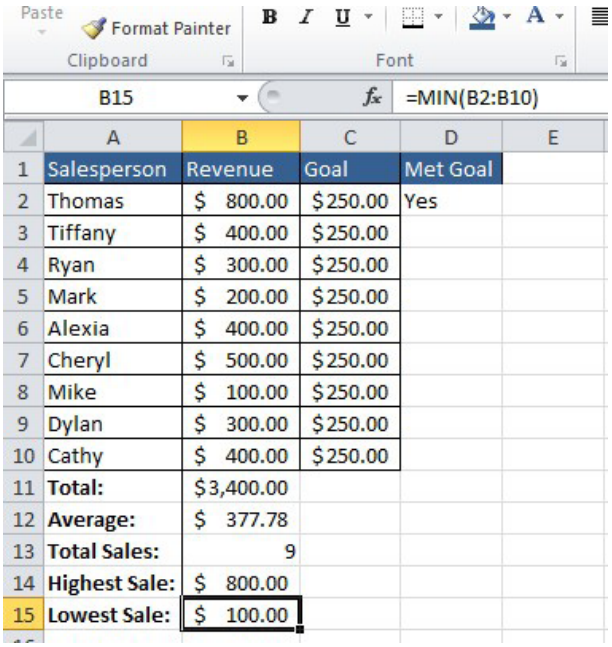


	A	B	C	D	E
1	Salesperson	Revenue	Goal	Met Goal	
2	Thomas	$ 800.00	$250.00	Yes	
3	Tiffany	$ 400.00	$250.00		
4	Ryan	$ 300.00	$250.00		
5	Mark	$ 200.00	$250.00		
6	Alexia	$ 400.00	$250.00		
7	Cheryl	$ 500.00	$250.00		
8	Mike	$ 100.00	$250.00		
9	Dylan	$ 300.00	$250.00		
10	Cathy	$ 400.00	$250.00		
11	**Total:**	$3,400.00			
12	**Average:**	$ 377.78			
13	**Total Sales:**	9			
14	**Highest Sale:**	$ 800.00			

Formula 6: MIN

This function allows you to find the smallest amount within a given range. =MIN(Range)

➢ Let's say you want to find the lowest sale in our table. You would enter: **= MIN(B2:B10)**

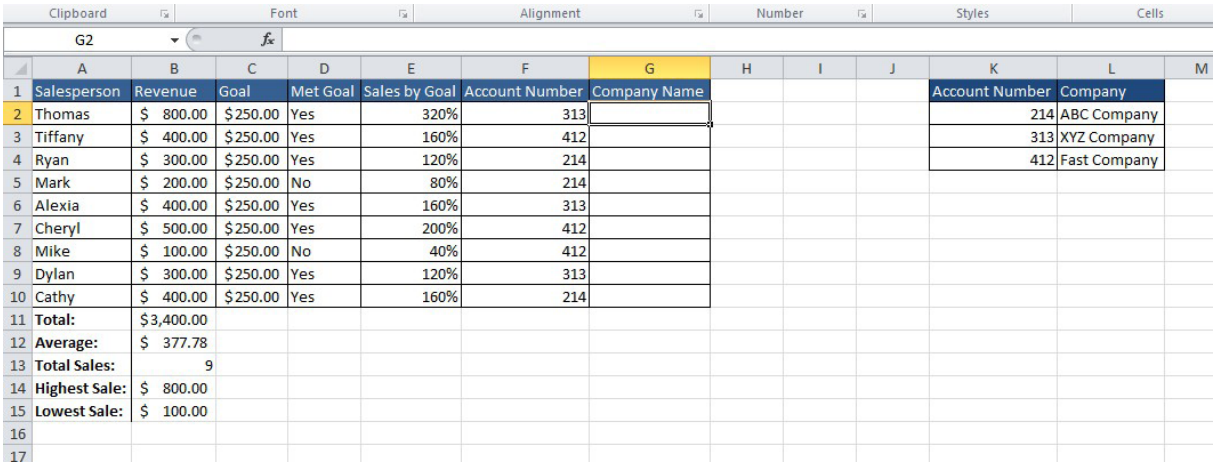


	A	B	C	D	E
1	Salesperson	Revenue	Goal	Met Goal	
2	Thomas	$ 800.00	$250.00	Yes	
3	Tiffany	$ 400.00	$250.00		
4	Ryan	$ 300.00	$250.00		
5	Mark	$ 200.00	$250.00		
6	Alexia	$ 400.00	$250.00		
7	Cheryl	$ 500.00	$250.00		
8	Mike	$ 100.00	$250.00		
9	Dylan	$ 300.00	$250.00		
10	Cathy	$ 400.00	$250.00		
11	**Total:**	$3,400.00			
12	**Average:**	$ 377.78			
13	**Total Sales:**	9			
14	**Highest Sale:**	$ 800.00			
15	**Lowest Sale:**	$ 100.00			

Formula 7: VLOOKUP

This function allows you to find the smallest amount within a given range. =MIN(Range)

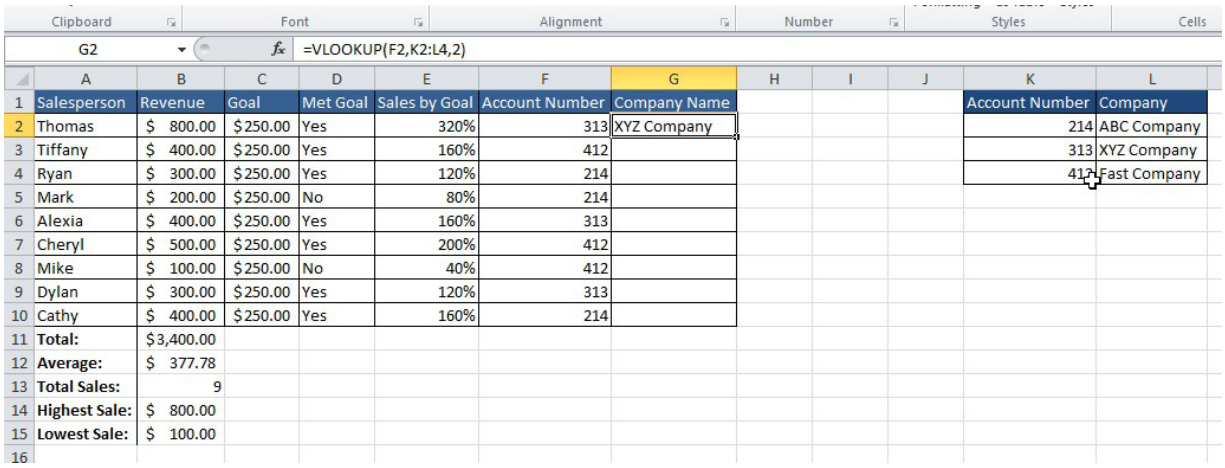
➢ For example, let's say you received the following spreadsheet and were asked to enter the name for each company corresponding to the account number:



	A	B	C	D	E	F	G	K	L
1	Salesperson	Revenue	Goal	Met Goal	Sales by Goal	Account Number	Company Name	Account Number	Company
2	Thomas	$ 800.00	$250.00	Yes	320%	313		214	ABC Company
3	Tiffany	$ 400.00	$250.00	Yes	160%	412		313	XYZ Company
4	Ryan	$ 300.00	$250.00	Yes	120%	214		412	Fast Company
5	Mark	$ 200.00	$250.00	No	80%	214			
6	Alexia	$ 400.00	$250.00	Yes	160%	313			
7	Cheryl	$ 500.00	$250.00	Yes	200%	412			
8	Mike	$ 100.00	$250.00	No	40%	412			
9	Dylan	$ 300.00	$250.00	Yes	120%	313			
10	Cathy	$ 400.00	$250.00	Yes	160%	214			
11	Total:	$3,400.00							
12	Average:	$ 377.78							
13	Total Sales:	9							
14	Highest Sale:	$ 800.00							
15	Lowest Sale:	$ 100.00							

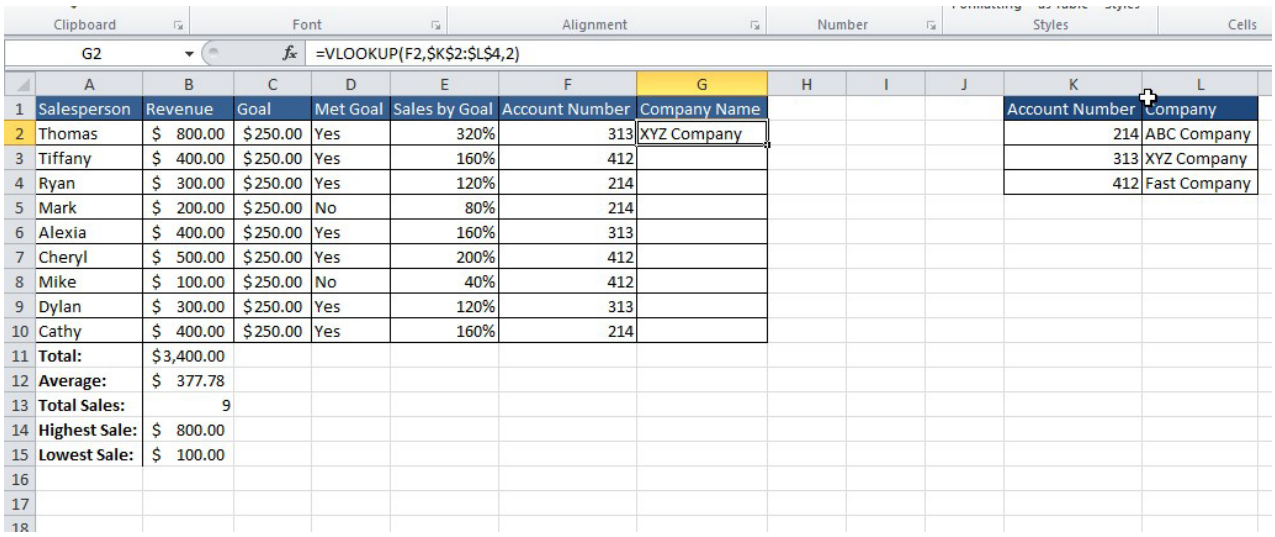
➢ It would be possible to just enter each individual company name, but this would be tedious – especially if you had 100 + Records to modify!

➢ So, instead, you can use VLookUp to enter the name of each company by referencing the account number and the table: =VLOOKUP(F2,K2:L4,L2) – Here F2 represents the information you are looking up, "K2:L4" represents that array being referenced and "L2" represents the information to return:



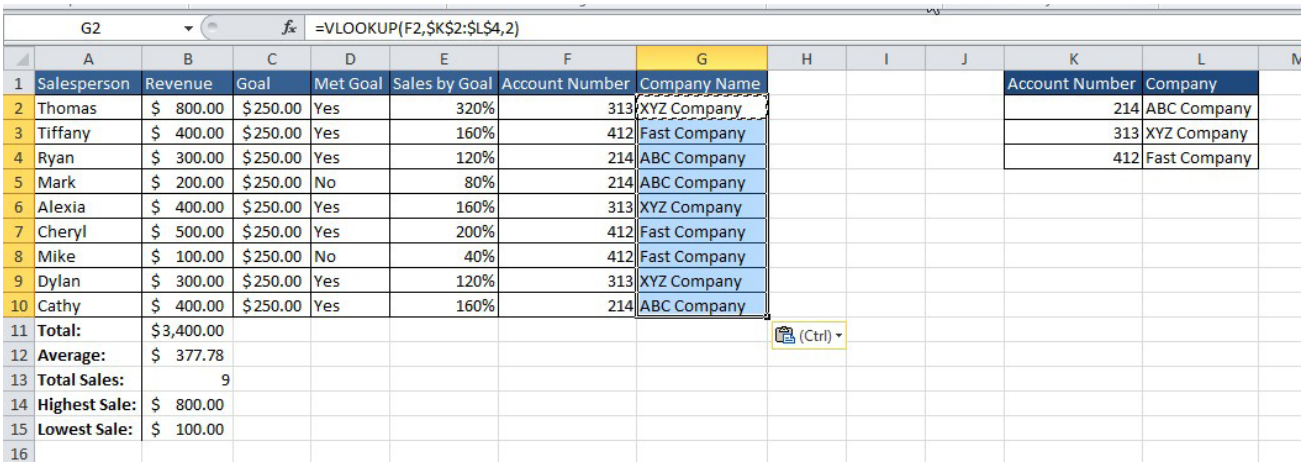
	A	B	C	D	E	F	G	K	L
1	Salesperson	Revenue	Goal	Met Goal	Sales by Goal	Account Number	Company Name	Account Number	Company
2	Thomas	$ 800.00	$250.00	Yes	320%	313	XYZ Company	214	ABC Company
3	Tiffany	$ 400.00	$250.00	Yes	160%	412		313	XYZ Company
4	Ryan	$ 300.00	$250.00	Yes	120%	214		412	Fast Company
5	Mark	$ 200.00	$250.00	No	80%	214			
6	Alexia	$ 400.00	$250.00	Yes	160%	313			
7	Cheryl	$ 500.00	$250.00	Yes	200%	412			
8	Mike	$ 100.00	$250.00	No	40%	412			
9	Dylan	$ 300.00	$250.00	Yes	120%	313			
10	Cathy	$ 400.00	$250.00	Yes	160%	214			
11	Total:	$3,400.00							
12	Average:	$ 377.78							
13	Total Sales:	9							
14	Highest Sale:	$ 800.00							
15	Lowest Sale:	$ 100.00							

Pro Tip: Before copying your formula the rest of the way down, you will want to set the Table Reference static with **Absolute Referencing**. This will keep the numbers from automatically changing. You can do this by adding $ around the cell identifiers, as in the image below, or highlighting the table range and selecting F4.



	A	B	C	D	E	F	G	H	I	J	K	L
1	Salesperson	Revenue	Goal	Met Goal	Sales by Goal	Account Number	Company Name				Account Number	Company
2	Thomas	$ 800.00	$250.00	Yes	320%	313	XYZ Company				214	ABC Company
3	Tiffany	$ 400.00	$250.00	Yes	160%	412					313	XYZ Company
4	Ryan	$ 300.00	$250.00	Yes	120%	214					412	Fast Company
5	Mark	$ 200.00	$250.00	No	80%	214						
6	Alexia	$ 400.00	$250.00	Yes	160%	313						
7	Cheryl	$ 500.00	$250.00	Yes	200%	412						
8	Mike	$ 100.00	$250.00	No	40%	412						
9	Dylan	$ 300.00	$250.00	Yes	120%	313						
10	Cathy	$ 400.00	$250.00	Yes	160%	214						
11	**Total:**	$3,400.00										
12	**Average:**	$ 377.78										
13	**Total Sales:**	9										
14	**Highest Sale:**	$ 800.00										
15	**Lowest Sale:**	$ 100.00										

Then you can copy it all the way down to return your results:

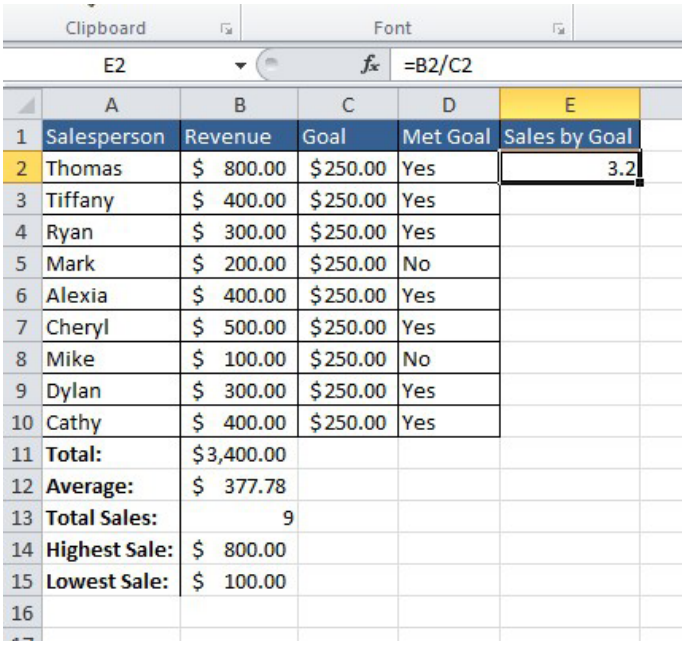


	A	B	C	D	E	F	G	H	I	J	K	L
1	Salesperson	Revenue	Goal	Met Goal	Sales by Goal	Account Number	Company Name				Account Number	Company
2	Thomas	$ 800.00	$250.00	Yes	320%	313	XYZ Company				214	ABC Company
3	Tiffany	$ 400.00	$250.00	Yes	160%	412	Fast Company				313	XYZ Company
4	Ryan	$ 300.00	$250.00	Yes	120%	214	ABC Company				412	Fast Company
5	Mark	$ 200.00	$250.00	No	80%	214	ABC Company					
6	Alexia	$ 400.00	$250.00	Yes	160%	313	XYZ Company					
7	Cheryl	$ 500.00	$250.00	Yes	200%	412	Fast Company					
8	Mike	$ 100.00	$250.00	No	40%	412	Fast Company					
9	Dylan	$ 300.00	$250.00	Yes	120%	313	XYZ Company					
10	Cathy	$ 400.00	$250.00	Yes	160%	214	ABC Company					
11	**Total:**	$3,400.00										
12	**Average:**	$ 377.78										
13	**Total Sales:**	9										
14	**Highest Sale:**	$ 800.00										
15	**Lowest Sale:**	$ 100.00										

Formula 8: Finding a Percentage in Excel

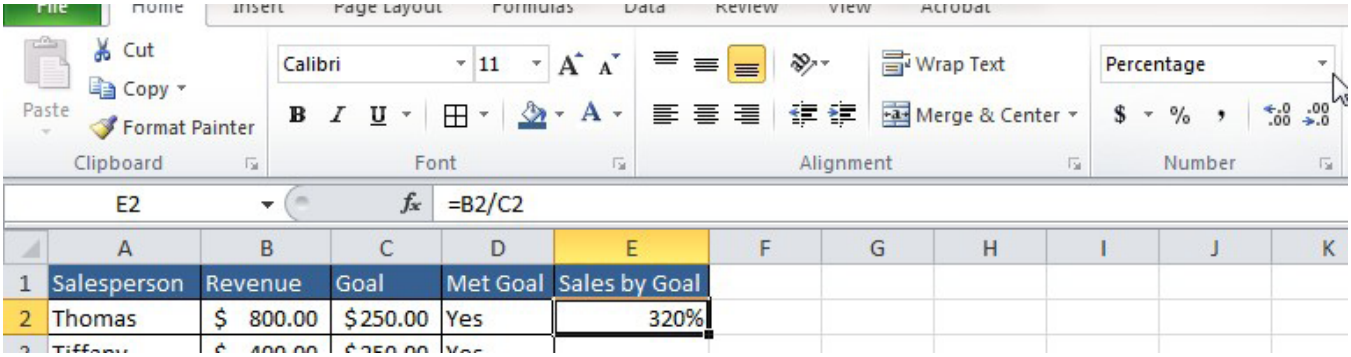
Excel can calculate just about anything if you enter the right formula. To find a percentage, you would use the formula: =Cell1/Cell2 and then be sure to change the formatting to Percentage.

➢ Let's say you want to find the percentage of goal for a sale made in our table. You would enter the sale amount over the goal amount: =B2/C2



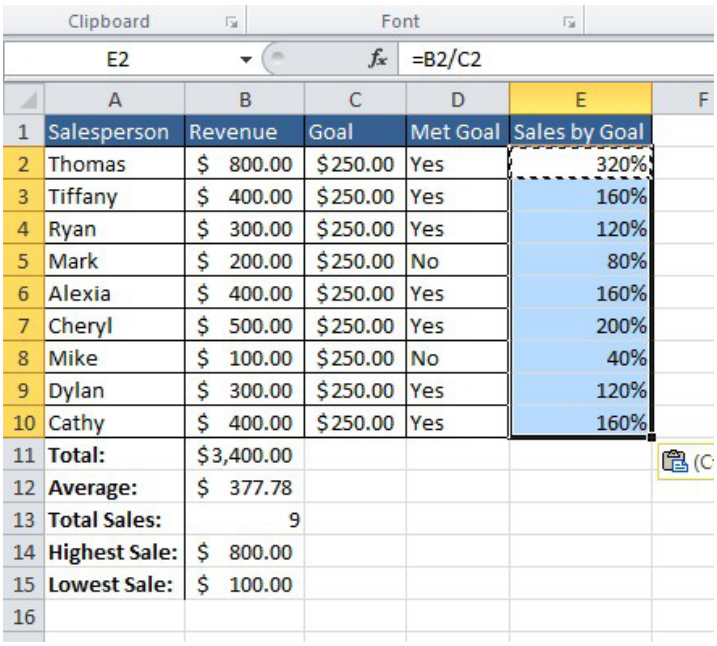
	A	B	C	D	E
1	Salesperson	Revenue	Goal	Met Goal	Sales by Goal
2	Thomas	$ 800.00	$250.00	Yes	3.2
3	Tiffany	$ 400.00	$250.00	Yes	
4	Ryan	$ 300.00	$250.00	Yes	
5	Mark	$ 200.00	$250.00	No	
6	Alexia	$ 400.00	$250.00	Yes	
7	Cheryl	$ 500.00	$250.00	Yes	
8	Mike	$ 100.00	$250.00	No	
9	Dylan	$ 300.00	$250.00	Yes	
10	Cathy	$ 400.00	$250.00	Yes	
11	**Total:**	$3,400.00			
12	**Average:**	$ 377.78			
13	**Total Sales:**	9			
14	**Highest Sale:**	$ 800.00			
15	**Lowest Sale:**	$ 100.00			
16					

To turn the '3.2' into a percentage, you change the cell format:



	A	B	C	D	E
1	Salesperson	Revenue	Goal	Met Goal	Sales by Goal
2	Thomas	$ 800.00	$250.00	Yes	320%

And then just copy the formula down the remaining cells:



	A	B	C	D	E	F
1	Salesperson	Revenue	Goal	Met Goal	Sales by Goal	
2	Thomas	$ 800.00	$250.00	Yes	320%	
3	Tiffany	$ 400.00	$250.00	Yes	160%	
4	Ryan	$ 300.00	$250.00	Yes	120%	
5	Mark	$ 200.00	$250.00	No	80%	
6	Alexia	$ 400.00	$250.00	Yes	160%	
7	Cheryl	$ 500.00	$250.00	Yes	200%	
8	Mike	$ 100.00	$250.00	No	40%	
9	Dylan	$ 300.00	$250.00	Yes	120%	
10	Cathy	$ 400.00	$250.00	Yes	160%	
11	**Total:**	$3,400.00				
12	**Average:**	$ 377.78				
13	**Total Sales:**	9				
14	**Highest Sale:**	$ 800.00				
15	**Lowest Sale:**	$ 100.00				
16						

Armed with knowledge of formulas, Anthony was able to cut his daily tasks significantly. He printed a formula "Cheat Sheet" that he pinned up on his wall. He references nearly every day when does his sales totals.

Bonus: Print-Friendly Formula Cheat Sheet

1. **SUM Formula** – Adds the total of a given range.
   =SUM(range) **Example: =SUM(A1:A150)**

2. **AVERAGE Formula** – Finds the average of a given range
   =AVERAGE(range) **Example: =AVERAGE(B1:B150)**

3. **IF Function** – Allows you to return a specific value based on criteria you set.
   =IF(logical_statement, return this if logical statement is true, return this if logical statement is false) **Example: =IF(B2>C2, "Yes", "No")**

4. **COUNT Formula** – Finds the total number of cells containing a value in a given range
   = COUNT(range) **Example: = COUNT(C1:c150)**

5. **MAX Formula** – Finds the highest value in a given range
   =MAX(range) **Example: = MAX(D1:D150)**

6. **MIN Formula** – Finds the lowest value in a given range
   =MIN(range) **Example: =MIN(E1:E150)**

7. **VLOOKUP Function** – This function allows you to find things in a given range by row.
   =VLOOKUP(value you're looking for, range you're looking within, value the formula returns) **Example: =VLOOKUP(F2,K2:L4,L2)**

8. **Percentage Formula** – Finds a percentage when comparing two numbers
   =Cell1/Cell2 (and then format the cell with the % tool) **Example: =A1/B1**

We hope you enjoyed this free guide, and don't forget to check out other free resources and great training programs at:

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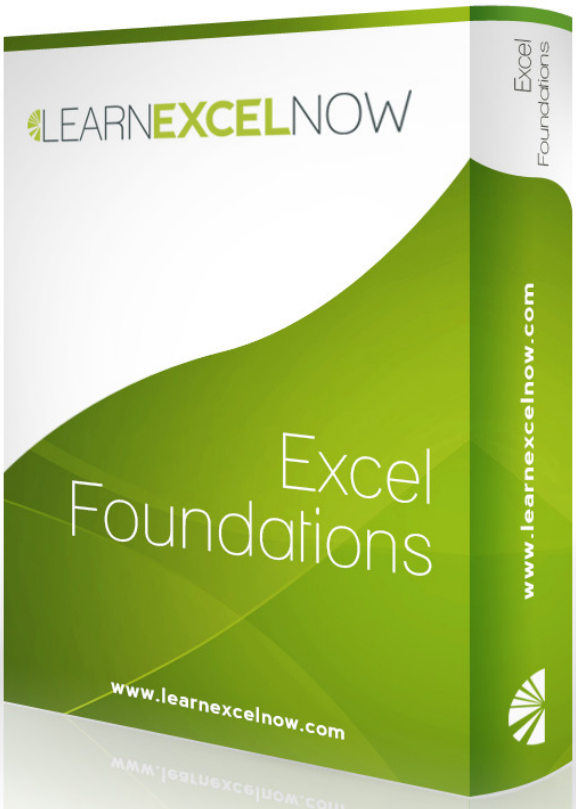

Have questions or want more information?
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