Calculate the amount if you know the total and percentage

For example, if you purchase a computer for $800 and there is an 8.9% sales tax, how much do you have to pay for the sales tax? In this example, you want to find 8.9% of 800.

Example

The example may be easier to understand if you copy it to a blank worksheet.

⊞ How to copy an example

1. Create a blank workbook or worksheet.

2. Select the example in the Help topic.

    NOTE Do not select the row or column headers.

    Selecting an example from Help

3. Press CTRL+C.

4. In the worksheet, select cell A1, and press CTRL+V.

5. To switch between viewing the results and viewing the formulas that return the results, press CTRL+` (grave accent), or on the **Tools** menu, point to **Formula Auditing**, and then click **Formula Auditing Mode**.

	A	B
1	**Purchase price**	**Sales tax (in decimal form)**
2	800	0.089
	Formula	**Description (Result)**
	=A2*B2	Multiplies 800 by 0.089 to find the amount of sales tax to pay ($71.20)

NOTE To convert a number in percentage format to a decimal, divide it by 100. For example, the sales tax in this example (8.9) divided by 100 is .089.

Calculate the percentage if you know the total and amount

For example, if you score 42 points correctly out of 50, what is the percentage of correct answers?

Example

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⊞ How to copy an example

1. Create a blank workbook or worksheet.

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	A	B
1	**Points answered correctly**	**Total points possible**
2	42	50
	Formula	**Description (Result)**
	=A2/B2	Divides 42 by 50 to find the percentage of correct answers (0.84 or 84%)

NOTE To display the number as a percentage, select the cell and then click **Percent Style** % on the **Formatting** toolbar.

Calculate the total if you know the amount and percentage

For example, the sale price of a shirt is $15, which is 25% off the original price. What is the original price? In this example, you want to find 75% of which number equals 15.
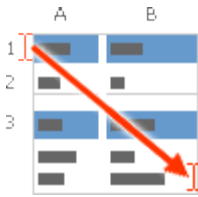
Example

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	A	B
1	**Sale price**	**100% minus the discount (in decimal form)**
2	15	0.75
	Formula	**Description (Result)**
	=A2/B2	Divides 15 by 0.75 to find the original price (20)

Calculate the difference between two numbers as a percentage

For example, your earnings are $2,342 in November and $2,500 in December. What is the percentage change in your earnings between these two months? To do this task, use the ABS function and the subtraction (-) and division (/) operators.
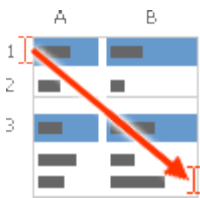
Example

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How to copy an example

1. Create a blank workbook or worksheet.

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4. In the worksheet, select cell A1, and press CTRL+V.

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	A	B
1	November earnings	December earnings
2	2342	2500
	Formula	**Description (Result)**
	=(B2-A2)/ABS(A2)	Divides the difference between the second and first numbers by the absolute value of the first number to get the percentage change (0.06746 or 6.75%)

NOTE To display the number as a percentage, select the cell and then click **Percent Style** % on the **Formatting** toolbar.

Function details

ABS

Increase or decrease a number by a percentage

For example, you spend an average of $25 on food each week, and you want to cut your weekly food expenditures by 25%. How much can you spend? Or, if you want to increase your weekly food allowance of $25 by 25%, what is your new weekly allowance?

Example

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	A	B
1	**Number**	**Percentage**
2	25	25%

Formula	Description (Result)
=A2*(1-B2)	Decreases 25 by 25% (18.75)
=A2*(1+B2)	Increases 25 by 25% (31.75)
=A2*(1+35%)	Increases 25 by 35% (33.75)

NOTE   When you type a number followed by a percent sign (%), the number is interpreted as a hundredth of its value. For example, 5% is interpreted as .05.