

Chapter 7

## Content

- Find the percentage of a total
- Find the percentage of change between two number
- Find the total when you know the amount and percentage
- Find an amount when you know the total and percentage
- Increase or decrease a number by a percentage

Find the percentage of a total

## Find the percentage of a total

Let's say that you answered 42 questions out of 50 correctly on a test. What is the percentage of correct answers?

1. Click any blank cell.
2. Type $=42 / 50$, and then press RETURN .

The result is 0.84 .
3. Select the cell that contains the result from step 2 .
4. On the Home tab, click

The result is $84.00 \%$, which is the percentage of correct answers on the test.

Note: To change the number of decimal places that appear in the result, click Increase Decimal $\stackrel{5}{500}$ or Decrease Decimal

Source: https://support.microsoft.com/en-us/excel

Find the percentage of
change between two number


## Find the percentage of change between two numbers

Let's say that your earnings are $\$ 2,342$ in November and $\$ 2,500$ in December. What is the percentage of change in your earnings between these two months? Then, if your earnings are $\$ 2,425$ in January, what is the percentage of change in your earnings between December and January? You can calculate the difference by subtracting your new earnings from your original earnings, and then dividing the result by your original earnings.

Calculate a percentage of increase

1. Click any blank cell.
2. Type $=(2500-2342) / 2342$, and then press RETURN .

The result is 0.06746 .
3. Select the cell that contains the result from step 2.
4. On the Home tab, click


The result is $6.75 \%$, which is the percentage of increase in earnings.

Note: To change the number of decimal places that appear in the result, click Increase Decimal or Decrease Decimal $\begin{array}{r}0.0 \\ \Rightarrow .0 \\ \hline\end{array}$

## Source:

https://support.microsof
t.com/en-us/excel

Calculate a percentage of decrease

1. Click any blank cell.
2. Type $=(2425-2500) / \mathbf{2 5 0 0}$, and then press RETURN .

The result is -0.03000 .
3. Select the cell that contains the result from step 2.
4. On the Home tab, click $\%$.

The result is $-3.00 \%$, which is the percentage of decrease in earnings.

# Note: To change the number of decimal places that appear in the result, click Increase Decimal or Decrease Decimal <div class="inline-tabular"><table id="tabular" data-type="subtable">
<tbody>
<tr style="border-top: none !important; border-bottom: none !important;">
<td style="text-align: center; border-left-style: solid !important; border-left-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top: none !important; width: auto; vertical-align: middle; ">$\stackrel{00}{00}$</td>
</tr>
<tr style="border-top: none !important; border-bottom: none !important;">
<td style="text-align: center; border-left-style: solid !important; border-left-width: 1px !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">0</td>
</tr>
</tbody>
</table>
<table-markdown style="display: none">| $\stackrel{00}{00}$ |
| :---: |
| 0 |</table-markdown></div> 

Source: https://support.microsoft.com/en-us/excel

Find the total when you know the amount and percentage


Let's say that 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 .

1. Click any blank cell.
2. Type $=15 / 0.75$, and then press RETURN .

The result is 20 .
3. Select the cell that contains the result from step 2.
4. In newer versions:

On the Home tab, click \$ .
The result is $\$ 20.00$, which is the original price of the shirt.

## In Excel for Mac 2011:

On the Home tab, under Number, click Currency $\square$
The result is $\$ 20.00$, which is the original price of the shirt.

Note: To change the number of decimal places that appear in the result, click Increase Decimal 5 $\stackrel{0}{00} 5$.

Source:
https://support.microsoft.co m/en-us/excel

Find an amount when you know the total and percentage

## Find an amount when you know the total and percentage

Let's say that want to purchase a computer for $\$ 800$ and must pay an additional $8.9 \%$ in sales tax. How much do you have to pay for the sales tax? In this example, you want to find $8.9 \%$ of 800 .

1. Click any blank cell.
2. Type $=800 * 0.089$, and then press RETURN.

The result is 71.2.
3. Select the cell that contains the result from step 2.
4. In newer versions:

On the Home tab, click \$ .
In Excel for Mac 2011:

On the Home tab, under Number, click Currency
The result is $\$ 71.20$, which is the sales tax amount for the computer.

Note: To change the number of decimal places that appear in the result, click Increase Decimal $\stackrel{\leftarrow}{5} .0$

## Source:

https://support.microsoft. com/en-us/excel

Increase or decrease a number by a percentage


## Increase or decrease a number by a percentage

Let's say that you spend an average of $\$ 113$ on food each week, and you want to increase your weekly food expenditures by $25 \%$. How much can you spend? Or, if you want to decrease your weekly food allowance of $\$ 113$ by $25 \%$, what is your new weekly allowance?

Increase a number by a percentage

1. Click any blank cell.
2. Type $=113^{*}(1+0.25)$, and then press RETURN .

The result is 141.25 .
3. Select the cell that contains the result from step 2.

Source: https://support.microsoft.com/en-us/excel

## 4. In newer versions:

On the Home tab, click $\$$.

## In Excel for Mac 2011:

On the Home tab, under Number, click Currency
The result is $\$ 141.25$, which is a $25 \%$ increase in weekly food expenditures.

Note: To change the number of decimal places that appear in the result, click Increase Decimal
or Decrease Decimal $\begin{array}{r}\stackrel{00}{-00} \text {. } \\ \hline\end{array}$.

Source: https://support.microsoft.com/en-us/excel

1. Click any blank cell.
2. Type $=113^{*}(1-0.25)$, and then press RETURN .

The result is 84.75 .
3. Select the cell that contains the result from step 2.
4. In newer versions:

On the Home tab, click


In Excel for Mac 2011:

On the Home tab, under Number, click Currency
The result is $\$ 84.75$, which is a $25 \%$ reduction in weekly food expenditures.
Source:
Note: To change the number of decimal places that appear in the result, click Increase Decimal

## Thank you

