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E - B O O K

INTRODUCTION TO
FIBONACCI

TABLE OF CONTENT

INTRODUCTION

Continuing our commitment to provide educational resources to all our traders, we are very excited to be presenting the Introduction to Fibonacci ebook.

Fibonacci is one of the most popular methods of technical analysis and many traders are using Fibonacci to find trading opportunities, practise risk management and reach their target levels.
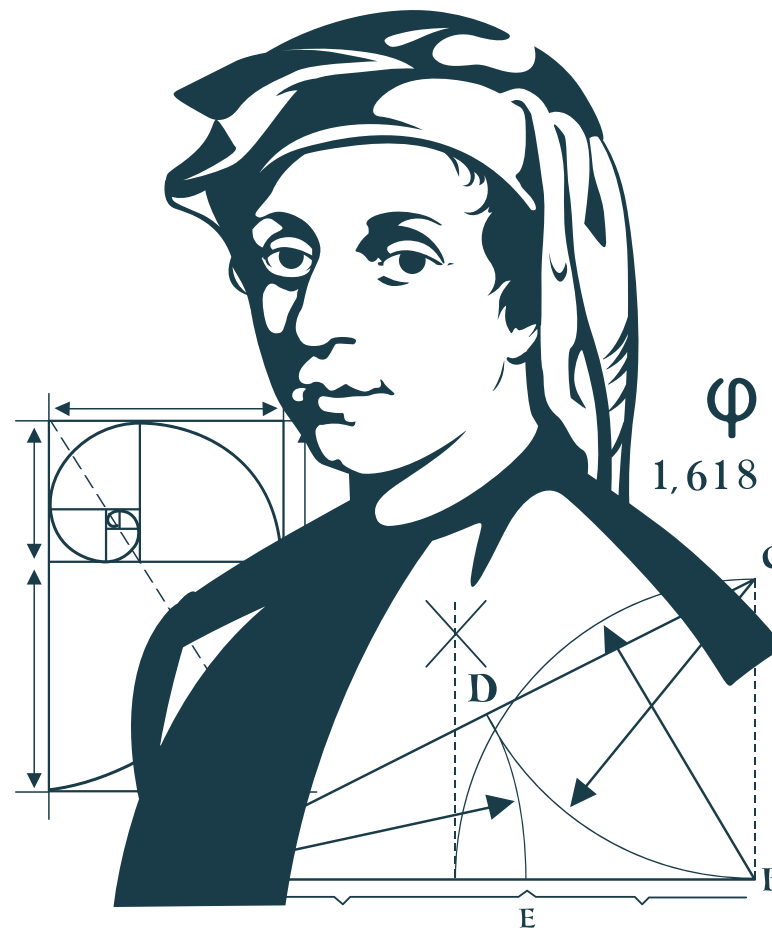
For some traders, Fibonacci may seem complicated and difficult to implement, however it is successfully used by many beginner traders as well as advanced traders.

This ebook aims to help you understand what Fibonacci is and how it may be used for an effective trading journey.

Happy Learning

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BEHIND
Fibonacci

Leonardo Bonacci or Leonardo of Pisa later known as Fibonacci was an Italian mathematician in the 12th century. Although many people are under the impression that Leonardo Bonacci invented the Fibonacci sequence, he actually did not. He simply introduced it to the Western World in his book Liber Abaci (Book of Calculation) in 1202.

Leonardo Bonacci's legacy still lives today as he is considered by many as one of the greatest mathematicians of all times and his work is still used by many people, especially traders.

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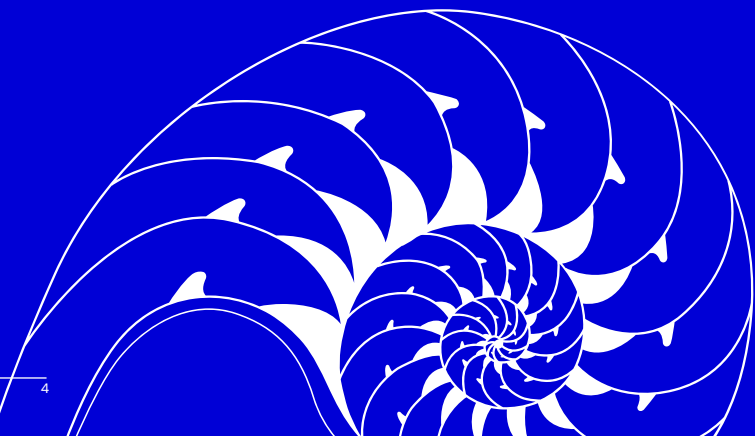
Fibonacci sequence

Fibonacci sequence is a formula referring to a series of numbers which describe in perfect proportions basically anything in the universe. Every number in the sequence is the sum of the two numbers that come before it. Here it is:

1,1,2,3,5,8,13,21,34,55,89,144,233,377...

Mathematically this is how it looks like:
1+1=2
2+1=3
3+2=5
5+3=8
8+5=13

What is truly interesting is that dividing any two consecutive numbers will give you essentially the same result.

For example:
Let's take the two following numbers 21 and 34 and divide them. Here is how it looks like:
21 / 34 = 0.6176

Now let's take the next two following numbers, 34 and 55 and divide them. Here is what we get -
34 / 55 = 0,618

Let's do the same with the next couple of numbers, 55 and 89 and here is what we will get -
55 / 89 = 0,6179

Each of these examples lead to almost to the same result 0.618
In addition to this, there is also a similar effect when the second consecutive number is divided.

For example:
21 / 55 = 0.3818
34 / 89 = 0.382
55 / 144 = 0.3819

The result once again is always almost identical.

To recap, what is evident by the examples above is that any consecutive number forward, once its retraced back, will lead to the same level of retracement: 61.8. Similarly, jumping a number ahead, to the next consecutive number and retrace it, will always give the same result: 38.2

In trading this is important because it helps identify the fact that every trend will eventually follow up with a pullback / retrace / correction. Understanding these ratios and movements allows traders to anticipate pullback levels and predict possible trading zone and targets.
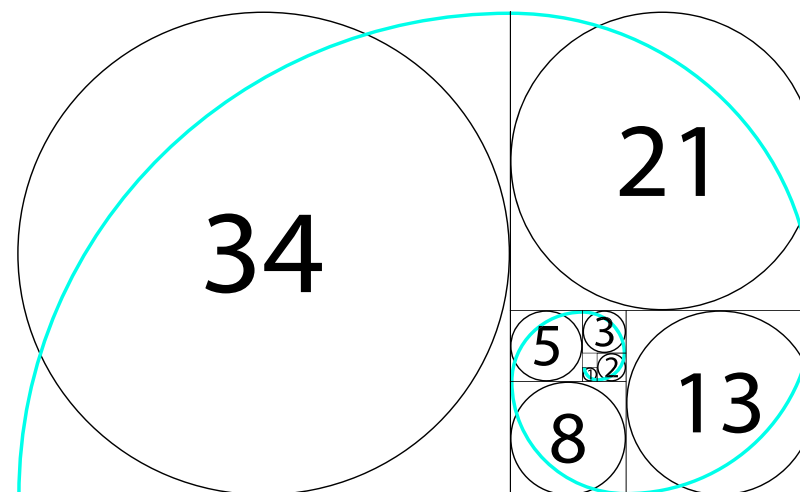
Important Fibonacci levels

The reality is that traders are not required to know all the numbers in the Fibonacci sequence or to spend time memorizing the sequence, or even worry about getting the calculations right. MT5 is equipped with great tools which help determine these levels.

As seen earlier, there are different Fibonacci numbers that traders use and rely on some levels more than the others. The most used numbers are:

In Fibonacci retracement

61.8%
50%
38.2%
23.6%

And in Fibonacci expansion

161.8%
100%
61.8%

The 38.2 and 61.8 (Fibonacci retracement level) and 161.8 (Fibonacci expansion level) ratios are called the golden ratios and according to many, are the most reliable or important levels to work with.

Also, it is important to mention that many traders adjust the numbers to their own needs and many traders think that different numbers have better chances. However, it could be argued that the classic numbers remain the most reliable ones.

FIBONACCI RETRACEMENT

FIBONACCI EXPANSION

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WHY DO TRADERS USE FIBONACCI?

Trading is all about numbers. Prices, waves, trends are all about numbers and these numbers are always related to one another.

Fibonacci makes it easier to find a retrace or a pullback level when you notice a trending move which in turn makes it easier to decide when to join different market trends.

Technically speaking, Fibonacci levels allow traders to anticipate the correction \ retrace levels and use them accordingly for trading opportunities.

FIBONACCI ON MT5

As mentioned earlier, MT5 comes with built in tools that can help identify Fibonacci levels. Therefore, to effectively use Fibonacci, traders need to learn how to use these tools.

There are several Fibonacci tools on MT5. However, the two main ways and tools traders use Fibonacci in trading, are the following:
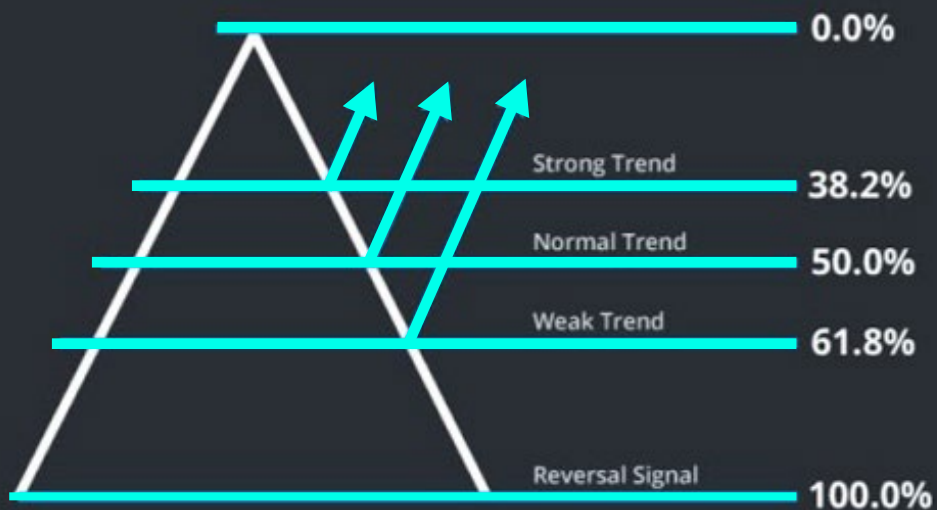• Fibonacci Retracement
• Fibonacci Expansions

They can be found on the trading platform as per the image below.
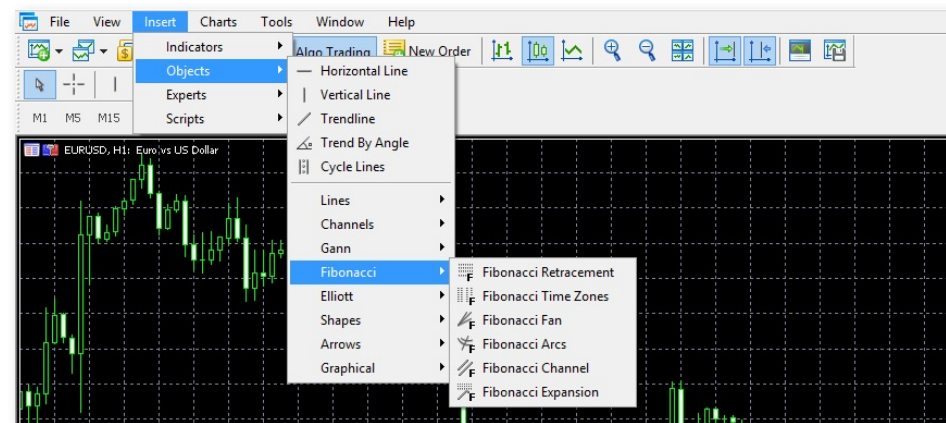
Or click on these icons in the "Toolbar" to use them.

Fibonacci Retracement

The Fibonacci retracement tool as the name suggests is used when the price is retracing (correcting) itself during a trend. There are various levels used in the Fibonacci retracement tool, the most common are 23.6%, 38.2%, 50%, 61.8% and in times 76.4%. These levels are mainly used to measure how "deep" a correction \ pullback can go before the price is returned to the original trend. The correct way to place the Fibonacci retracement is to find a swing top or swing bottom and plot the Fibonacci retracement levels on these swing points. Once you see an opposite move, this is where the second point is set.

How To Plot The Fibonacci Retracement On The Chart

It is quite easy to place the Fibonacci retracement tool on the chart. First of all, find the swing high and swing low that you want to measure. You can then select the Fibonacci retracement tool directly from the "toolbar" or you can go to the "Insert" tab – "Objects" and in the drop-down menu you can select the "Fibonacci retracement" tool. After selecting the tool, place it on the "leg" or "wave" (swing high and low) to find the retracement levels.

BULLISH

market
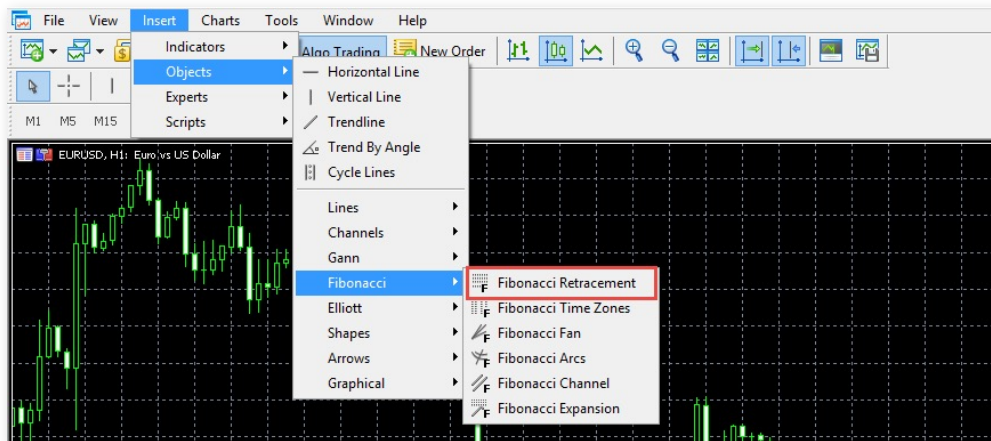
BULLISH TREND

In a bullish trend you would always place the starting point at the bottom\low (beginning) of the move and the ending point at the top (High).

The default levels predefined in MT5's Fibonacci retracement tool are 23.6%, 38,2%, 50% and 61,8%. Once the correction starts, the price can be expected to find its support area near the levels mentioned above.

Here is an example where an up move was present, followed by a correction before the price continued higher again. In this example, the price found its support area near the 61.8% Fibonacci retracement level.

In the above example, the price is in an uptrend and a correction down is expected. That means we should plot the Fibonacci retracement tool from point A (low) toward the last swing high at point B in order to find the Fibonacci levels and see how "deep" this correction can go.

In the example below the price is moving in a down trend. This means that there may possibly be a correction to the upside. Therefore, it's possible to plot the Fibonacci retracement tool from the High (B) to the Low (A).

In both examples above, the price had difficulties going through the retracement levels (marked in blue rectangle in the images) and creating a good support/resistance zone. Such levels can provide great trading opportunities.

BEARISH
market

BEARISH TREND

This is the exact opposite scenario of the bullish trend. When the trend is bearish you should place the starting point of the Fibonacci retracement tool at the top (High), towards the bottom (Low).

The example above shows how the Fibonacci retracement levels are placed and how the price finds its resistance area around the 50% Fibonacci retracement level. These levels act as support or resistance and many traders have their orders placed there to buy/sell. These levels can also be used to determine targets and stop losses.

HOW TO FIND SWING HIGH/LOW

To be able to plot the Fibonacci retracement, it's important to find the Last Swing High and Low on the chart.

SWING HIGH:

A high swing is created after a clear move upside. Starting from a low, rising to a significant move upside. A high is called a high if from this point there is a correction downside, ideally going below the previous low, like in the image below:

SWING LOW:

A swing low is created after a clear move downside. Starting from a high, going in a significant move downside. A low is call a low if from this point there is a correction upside, ideally going above the previous high, like in the image below:

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BULLISH RETRACEMENT:

By connecting the last swing low and the last swing high on our chart and plotting Fibonacci retracement, we can see the Fibonacci levels which we use to understand how deep the correction can be and what our potential buy zones would be after the correction is done.

BEARISH RETRACEMENT:

By connecting the last swing high and the last swing low on our chart, and plotting Fibonacci retracement, we can see the Fibonacci levels which we use to understand how deep the correction can be and what our potential sell zones would be after the correction is done like in the image below:

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How to Edit Or Delete The Fibonacci Retracement Tool On the Chart

One of the biggest benefits of using MT5 is that it allows you to customize Fibonacci levels so that they can meet your requirements.

To delete, edit or move your Fibonacci retracement tool, you need to activate it first. To do so just double click on the Fibonacci retracement line. When it becomes active the Fibonacci retracement line will have 3 dots or circles as shown in the image below.

Now right click on the line and you will see your options. Here you can select "delete" if you want to delete the Fibonacci line and it will disappear from the chart.

If you want to edit the Fibonacci line, right click on it when it's active and select "Properties".

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Under the "Common" Tab you will find the options to change the color and style of the line and if you would like you can add some description to it.

Now, for example, I have selected yellow color as you can see in the image below and the Fibonacci line has changed to yellow. Similarly, you can change it to any color of your choice.

Similarly, you can also change the style of the line to dashed or dotted or to thick or thin using the options shown in the images below.

The next tab you will find here is the "Levels". You can use this tab for the following purposes.

- Add new Fibonacci Levels by clicking the Add button.
- Remove Fibonacci Levels by clicking the Delete button.
- Reset the settings by clicking the Defaults buttons.
- Change the current settings and levels (Level and Description).
- Change the style of the actual Fibonacci levels line.

You can also change the color of the Fibonacci retracement levels line using the option below.

You can see the color of the Fibonacci retracement levels line changed to green in the image below. Similarly, you can change it to any color of your choice.

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The next tab, "**Parameters**" is rarely used, therefore it will not be analyzed.

Moving forward to the "**Visualization**" Tab. This one is interesting and useful when it comes to multi-timeframe analysis.

There will be times when the chart becomes a bit crowded and it may get difficult to stay focused, it's better to keep it simple and clean. This is when the Visualization option (that applies to any object, study, indicator in mt5, not only the Fibonacci levels) comes into play.

This tool essentially allows you to decide on what time frames the object will be visible. By default, "Show on all the time frames" is selected, meaning – that the Fibonacci you'll draw will be visible on ANY time frames you'll select. However, if you uncheck this tick, the greyed-out zones will become active and you can select the preferred ones.

Ok, so that's the Fibonacci retracement levels and how you can use them on MT5. Now, let's take it one step forward.
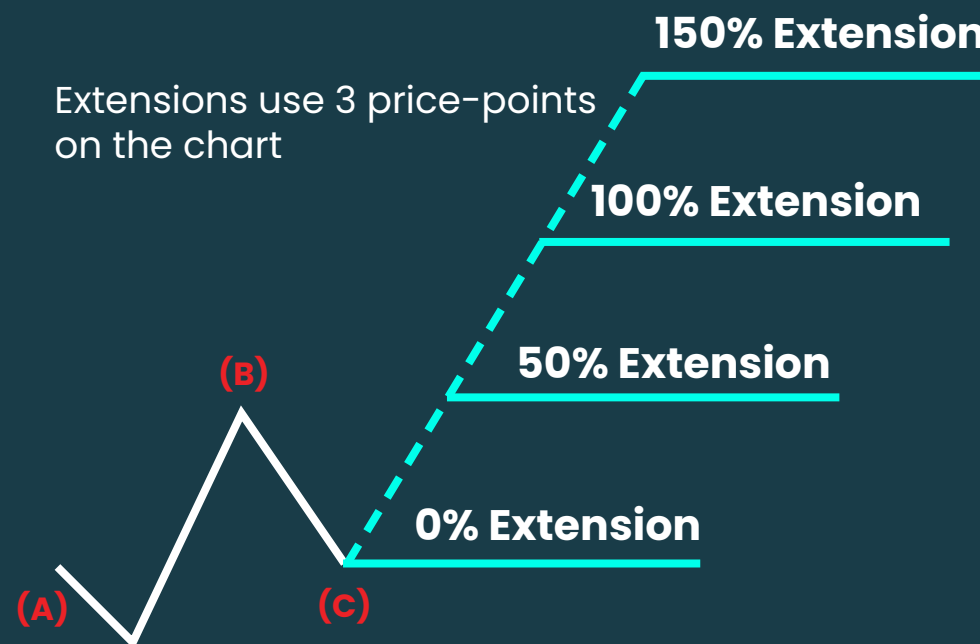
Fibonacci Expansion

As opposed to the Fibonacci Retracement Levels, the Expansion Levels are used to forecast potential levels where the price is heading in terms of the ongoing trending direction. In other words, if Retracement Levels suggest potential zones where the correction might end, Expansion Levels tell you where the ongoing trend might end. This could be really useful information for the trader because it can be used as an exit point\ target level.

Another use of Fibonacci expansion levels is to find where a whole trend\cycle is over and where a deep correction might starts from!

There are various levels used in the Fibonacci expansion tool. The most common are 61.8%, 100%, 161.8% and in times 261.8%. 61.8% and 161% are considered by many as the "Golden levels".

Extensions use 3 price-points on the chart

150% Extension

100% Extension

(B)

50% Extension

0% Extension

(A)

(C)

How to Plot a Fibonacci Expansion On the Chart?

BULLISH TREND

In an ongoing bullish trend,

1. Find the swing low (A) where the trend started.
2. Find the swing high (B) where the market stopped and went down for correction.
3. Find the swing low (C) of the correction (where the correction stopped).

Here is an example of Fibonacci expansion plotted in an ongoing bullish trend. The point A marked in the image below is the swing low where the trend started. The point B is the swing high where the market stopped and went down for correction. The point C is the swing low of the correction.

BEARISH TREND

It is just the exact opposite of the bullish trend.

1. Find the swing high (A) where the trend started.
2. Find the swing low (B) where the market stopped and went up for correction.
3. Find the swing high of the correction (C) (where the correction stopped).

Here is an example of Fibonacci expansion plotted in an ongoing bearish trend. The point A marked in the image below is the swing high where the trend started. The point B is the swing low where the market stopped and went up for correction. The point C is the swing high of the correction.

💡 **TRADING TIP**

Always allow deviation above/below the Expansion Level. Sometimes the price will miss the level by few points, sometimes it will break it and continue a bit further. We are looking for the zone around these levels NOT the exact, specific level.
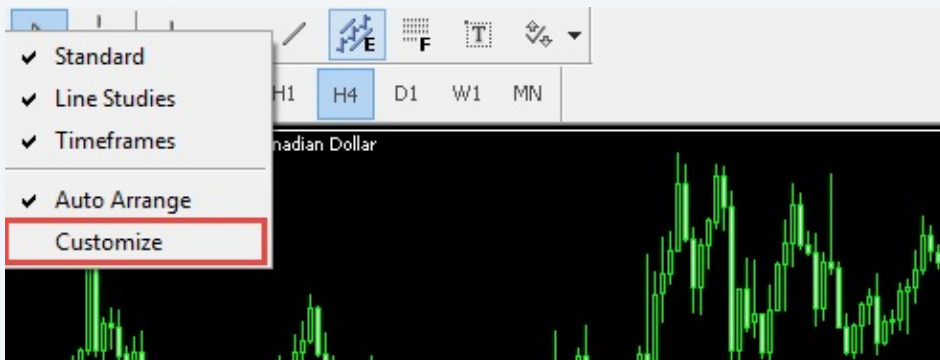
Where to Find the Fibonacci Expansion tool in the MT5 Platform?

Most likely by default you will find only the Fibonacci retracement tool in the toolbar, which means the Fibonacci expansion tool is not included:
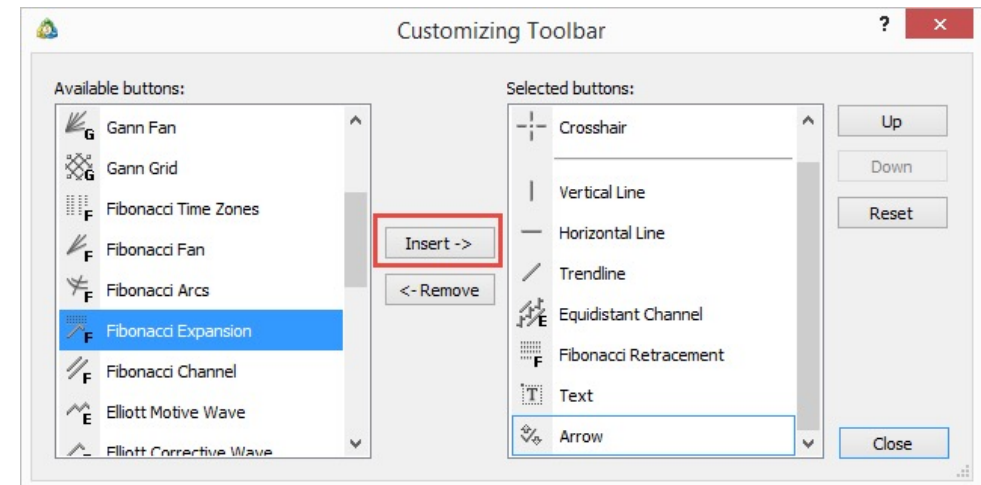

In order to include the Fibonacci Expansion tool to your toolbar, follow the steps below:

1. Right click on the Fibonacci retracement tool in the toolbar and select "Customize"

2. In the pop-up window, on the left hand-side find the "Fibonacci Expansion", click on it and then click the "Insert" button.
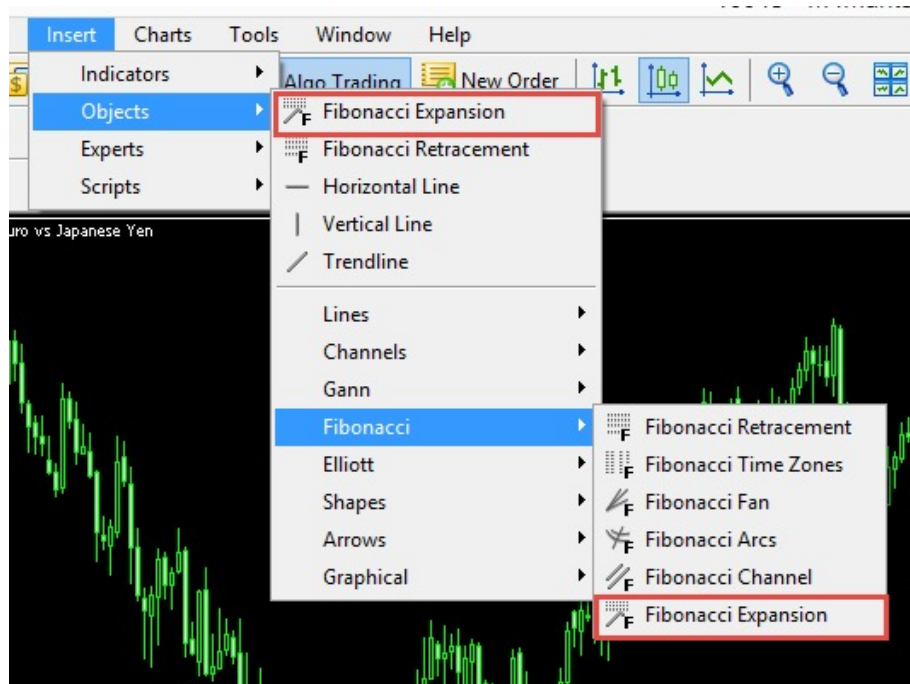

3. The Fibonacci Expansion should now appear on the right hand-side under "Selected"

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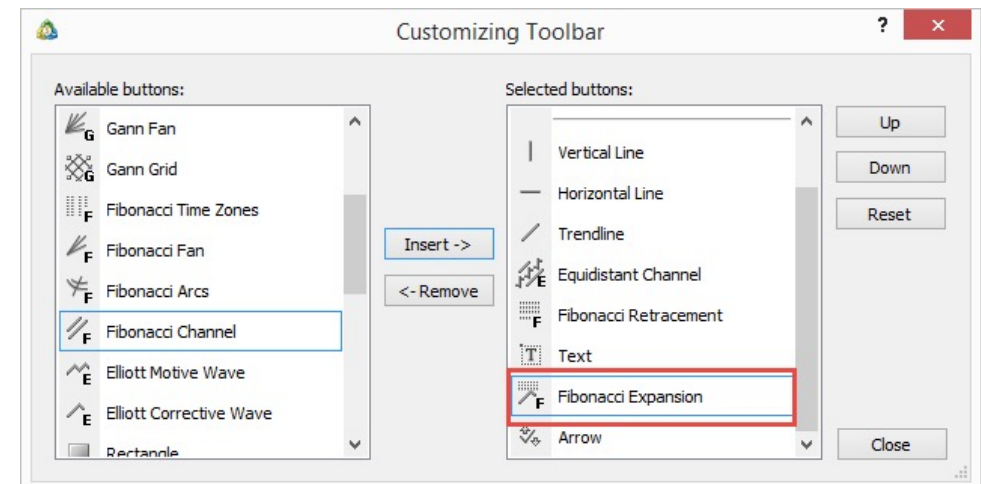
Now, after closing the pop-up window, the Fibonacci Expansion Button should appear in your Toolbar, here is the icon


Or alternatively you can go to the "Insert" tab – "Objects" and in the drop-down menu you can select the "Fibonacci expansion" tool.
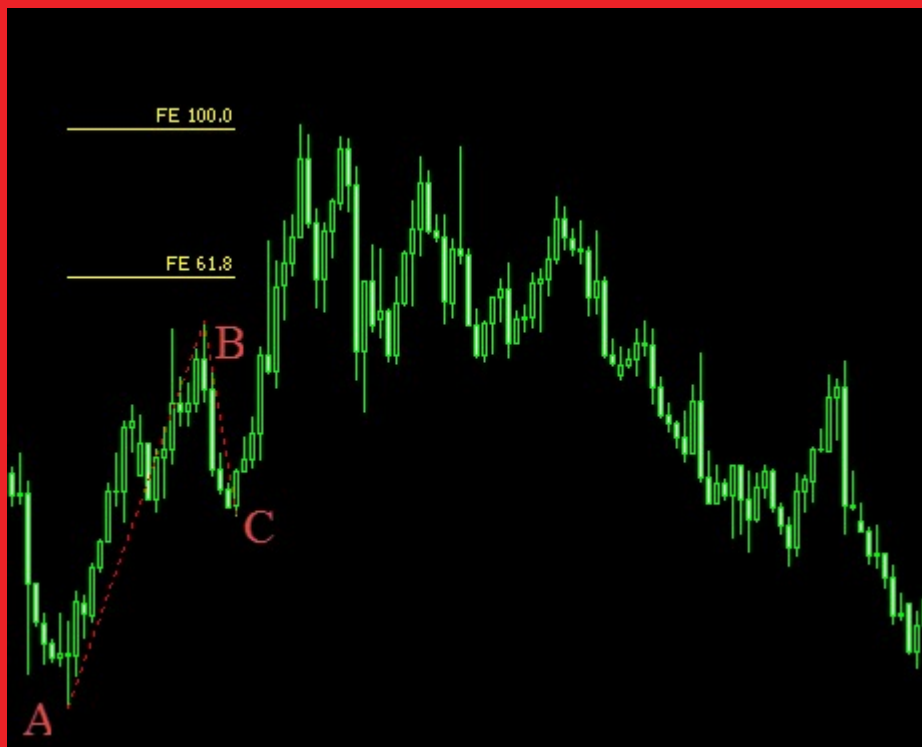

After selecting the Fibonacci Expansion button, in order to plot it on the chart, you need to do the following:

1. Click and hold the mouse button starting from point A.
2. Release the mouse button once you are at point B.
3. Now you have to accurately select point C.
4. To do so we need to activate the Fibonacci expansion by double clicking on it.
5. Once active you can move it around by dragging it and select point C.
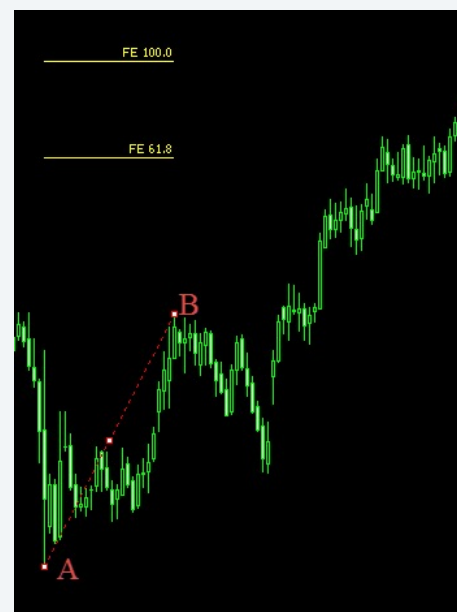
BULLISH EXAMPLE

BEARISH EXAMPLE

On the examples above you can clearly see how the Fibonacci expansion levels can help us projecting the potential targets and place our take profit levels.

Important Fibonacci Expansion Levels

The commonly used Fibonacci expansion levels are as follows:
61.8%, 100%, 138.2%, 161.8%, 200%, 238.2%, 261.8%

However, the real focus goes to these levels:
61.8%, 100%, 161.8%, 261.8%

As mentioned before, 61.8% and 161% are considered by many as the "Golden levels".

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How to Edit or Delete the Fibonacci Expansion tool?

In order to edit or delete Fibonacci expansion tool, you first need to activate it by, double clicking on it until you see the Circles/Dots appearing.
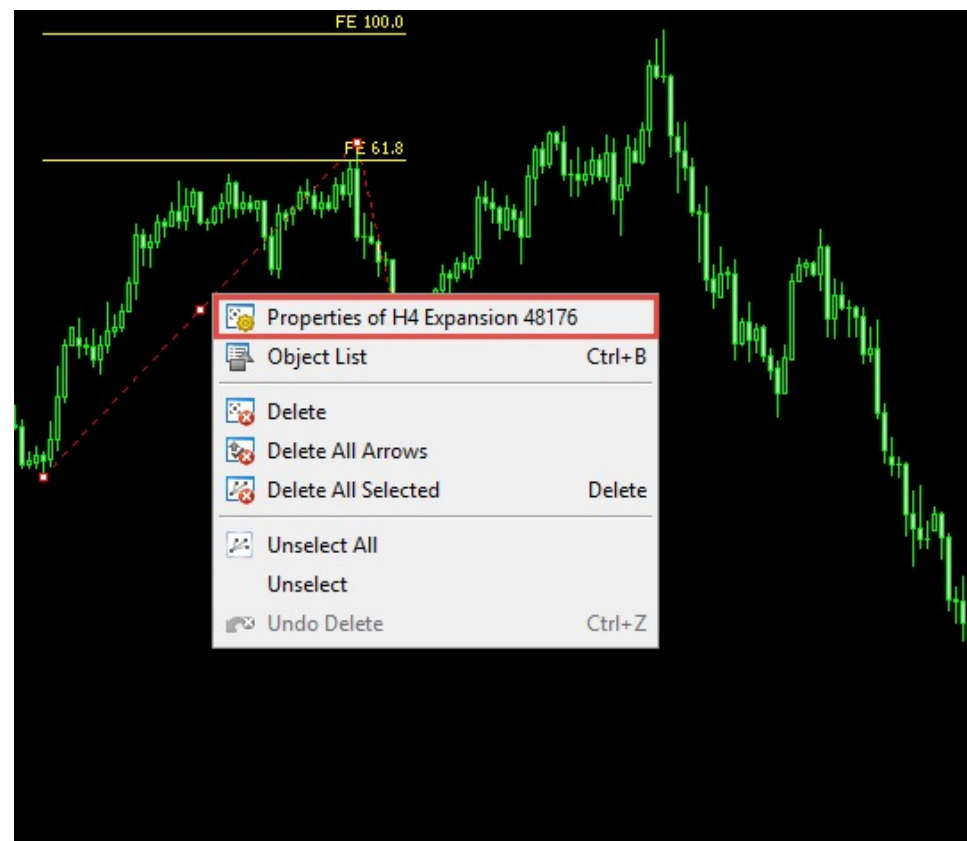
EXAMPLE OF ACTIVE FIBONACCI EXPANSION
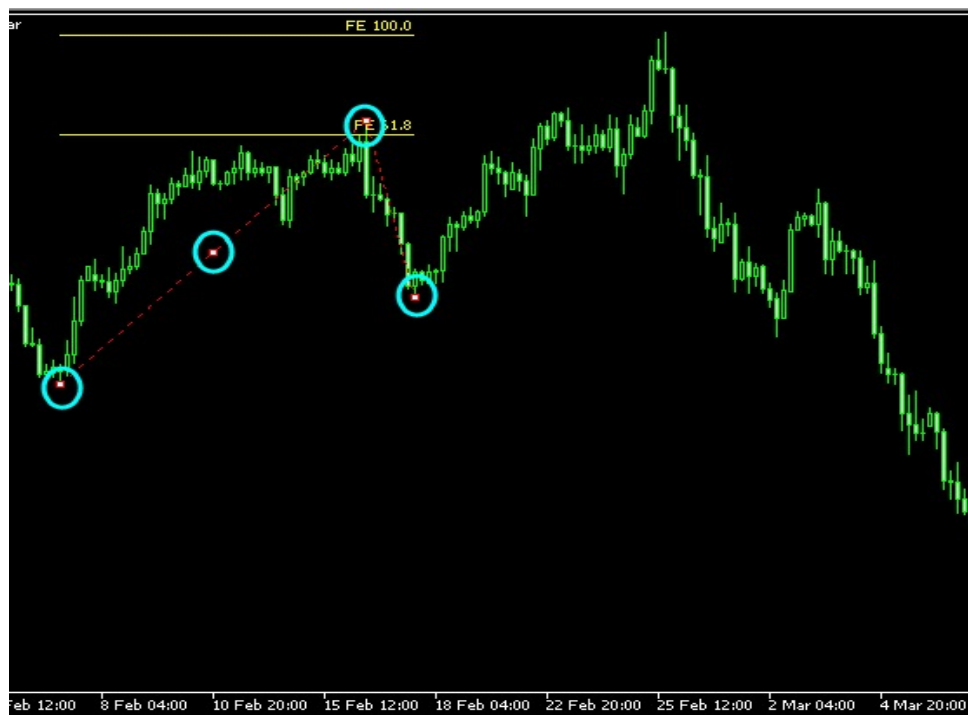
EXAMPLE OF NON-ACTIVE FIBONACCI EXPANSION

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While Active, right click on it and you will find options to edit and delete it. In order to delete it, just click on the "Delete" option shown in the image below.

In order to edit it go to "Properties".

Like the one of the "Fibonacci retracement" tool that we saw above, the general options here are the same. Under the "Common" Tab we will find the settings to change the color, style, and type of the lines.
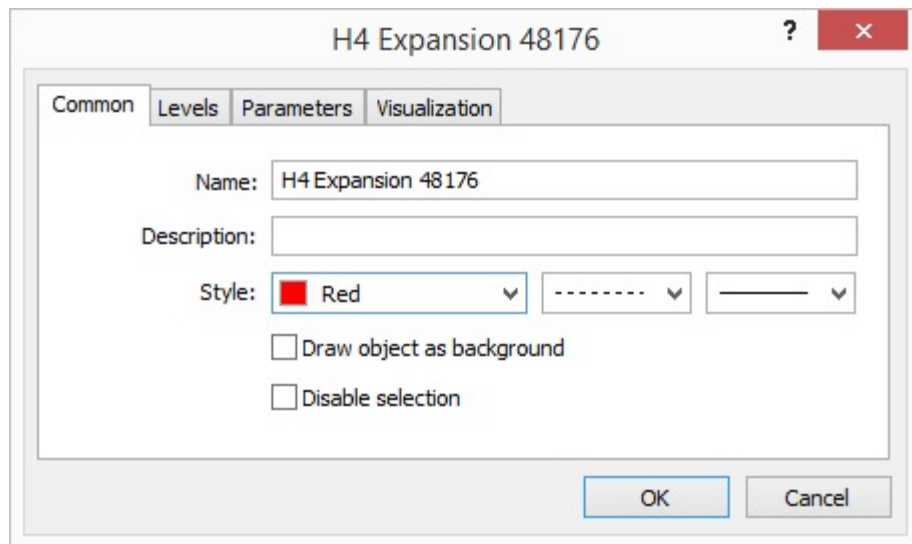
In the "Levels" tab we find the settings for the actual Fibonacci Expansion Levels. You can use them to:

• Add/Delete levels
• Reset the settings to Defaults
• Edit the levels that are already included
• Edit the Color and Style of the lines used to draw the levels

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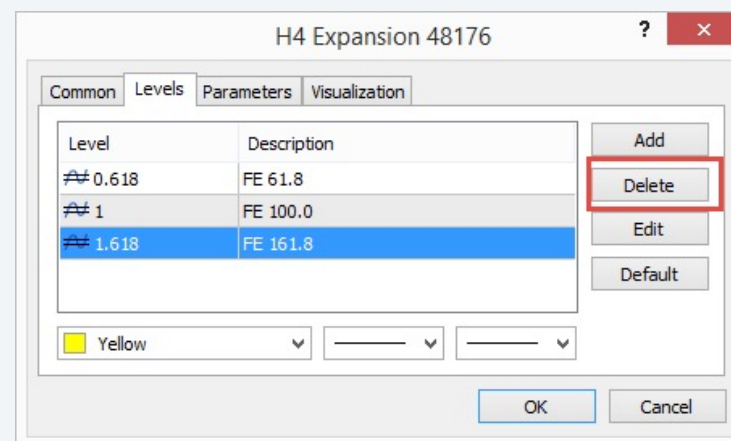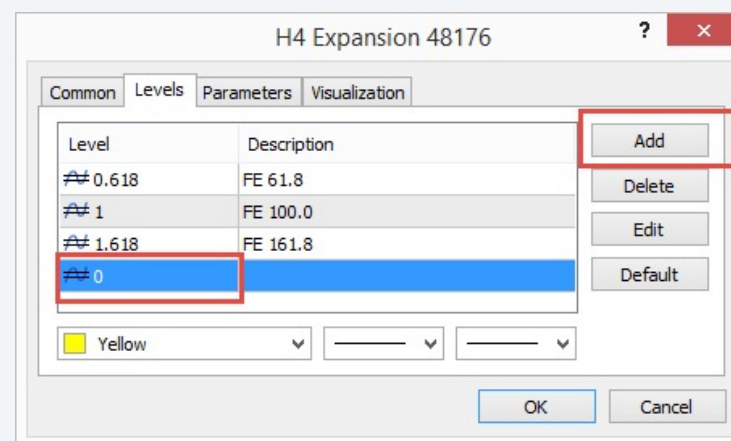
Examples of Fibonacci Expansion

BULLISH TREND

In this example the price broke above the 61.8% and moved higher to 100% level. This is where it found support and it retraced down. As you can see here the Fibonacci expansion levels are indeed acting as resistance zones for the price.

BEARISH TREND

In this example the price bounces and respects perfectly the 100% expansion level. After the correction it keeps moving lower to reach the 161.8% where again, the level is respected, and the price retraced to the upside. As you can see here the Fibonacci expansion levels are both acting as support zones for the price and projection levels for potential targets.

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3 STEPS
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Complete our Registration Form and access the Client Portal. Complete your Economic profile, upload the required documents and verify your profile.

Open a Live Account & Fund It
Choose "Open Live Account" under the Accounts tab and select an account. Click "Deposit funds" under the funds tab to select your funding method.

Download Platform & get Started
Choose "Downloads" tab under Trader's Menu and download your Preferred Platform. Launch your platform and start trading.

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Risk warning: Trading CFDs involves significant risk of loss.

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