Fibonacci Who?

We will be using Fibonacci ratios a lot in our trading so you better learn it and love it like your mother's home cooking. Fibonacci is a huge subject and there are many different Fibonacci studies with weird-sounding names but we're going to stick to two: retracement and extension.

Let us first start by introducing you to the Fib man himself...Leonardo Fibonacci.

No, Leonardo Fibonacci isn't some famous chef. Actually, he was a famous Italian mathematician, also known as a super duper uber ultra geek.

He had an "Aha!" moment when he discovered a simple series of numbers that created ratios describing the natural proportions of things in the universe.

The ratios arise from the following number series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144...

This series of numbers is derived by starting with 0 followed by 1 and then adding 0 + 1 to get 1, the third number. Then, adding the second and third number (1 + 1) to get 2, the fourth number, and so on.

After the first few numbers in the sequence, if you measure the ratio of any number to the succeeding higher number, you get .618. For example, 34 divided by 55 equals .618.

If you measure the ratio between alternate numbers you get .382. For example, 34 divided by 89 = 0.382 and that's as far as into the explanation as we'll go.

These ratios are called the "golden mean". Okay that's enough mumbo jumbo. With all those numbers, you could put an elephant to sleep. We'll just cut to the chase; these are the ratios you HAVE to know:

Fibonacci Retracement Levels
0.236, 0.382, 0.500, 0.618, 0.764

Fibonacci Extension Levels
0, 0.382, 0.618, 1.000, 1.382, 1.618

You won't really need to know how to calculate all of this. Your charting software will do all the work for you. Besides, we've got a nice Fibonacci calculator that can magically calculate those levels for you. However, it's always good to be familiar with the basic theory behind the indicator so you'll have the knowledge to impress your date.

Traders use the Fibonacci retracement levels as potential **support and resistance areas**. Since so many traders watch these same levels and place buy and sell orders on them to enter trades or place stops, the support and resistance levels tend to become a self-fulfilling prophecy.

Traders use the Fibonacci extension levels as **profit taking levels**. Again, since so many traders are watching these levels to place buy and sell orders to take profits, this tool tends to work more often than not due to self-fulfilling expectations.
Most charting software includes both Fibonacci retracement levels and extension level tools. In order to apply Fibonacci levels to your charts, you'll need to identify Swing High and Swing Low points.

A Swing High is a candlestick with at least two lower highs on both the left and right of itself.

A Swing Low is a candlestick with at least two higher lows on both the left and right of itself.

You got all that? Don't worry, we'll explain retracements, extensions, and most importantly, how to grab some pips using the Fib tool in the following sections.

Fibonacci Retracement

The first thing you should know about the Fibonacci tool is that it works best when the market is trending.

The idea is to go long (or buy) on a retracement at a Fibonacci support level when the market is trending up, and to go short (or sell) on a retracement at a Fibonacci resistance level when the market is trending down.

In order to find these retracement levels, you have to find the recent significant Swing Highs and Swings Lows. Then, for downtrends, click on the Swing High and drag the cursor to the most recent Swing Low.

For uptrends, do the opposite. Click on the Swing Low and drag the cursor to the most recent Swing High.

Got that? Now, let's take a look at some examples on how to apply Fibonacci retracements levels in the markets.

Uptrend

This is a daily chart of AUD/USD.

Here we plotted the Fibonacci retracement Levels by clicking on the Swing Low at .6955 on April 20 and dragging the cursor to the Swing High at .8264 on June 3. Tada! The software magically shows you the retracement levels.

As you can see from the chart, the retracement levels were .7955 (23.6%), .7764 (38.2%), .7609 (50.0%), .7454 (61.8%), and .7263 (76.4%).

Now, the expectation is that if AUD/USD retraces from the recent high, it will find support at one of those Fibonacci levels because traders will be placing buy orders at these levels as price pulls back.

Now, let's look at what happened after the Swing High occurred.

Price pulled back right through the 23.6% level and continued to shoot down over the next couple of weeks. It even tested the 38.2% level but was unable to close below it.

Later on, around July 14, the market resumed its upward move and eventually broke through the swing high. Clearly, buying at the 38.2% Fibonacci level would have been a profitable long term trade!

Downtrend: **Now, let's see how we would use the Fibonacci retracement tool during a downtrend. Below is a 4-hour chart of EUR/USD.**

As you can see, we found our Swing High at 1.4195 on January 26 and our Swing Low at 1.3854 a few days later on February 2. The retracement levels are 1.3933 (23.6%), 1.3983 (38.2%), 1.4023 (50.0%), 1.4064 (61.8%) and 1.4114 (76.4%).

The expectation for a downtrend is that if price retraces from this low, it will encounter resistance at one of the Fibonacci levels because traders will be ready with sell orders there.

Let's take a look at what happened next.

Yowza, isn't that a thing of beauty?!

The market did try to rally, stalled below the 38.2% level for a bit before testing the 50.0% level. If you had some orders either at the 38.2% or 50.0% levels, you would've made some mad pips on that trade.

In these two examples, we see that price *found* some temporary support or resistance at Fibonacci retracement levels. Because of all the people who use the Fibonacci tool, those levels become self-fulfilling support and resistance levels.

One thing you should take note of is that price won't always bounce from these levels. They should be looked at as *areas of interest*, or as Cyclopip likes to call them, "**KILL ZONES!**" We'll teach you more about that later on.

For now, there's something you should always remember about using the Fibonacci tool and it's that they are not always simple to use! If they were that simple, traders would always place their orders at Fib levels and the markets would trend forever.

In the next lesson, we'll show you what can happen when Fibonacci levels fail.

When Fibonacci Fails

Back in Grade 1, we said that support and resistance levels eventually break. Well, seeing as how Fibonacci levels are used to find support and resistance levels, this also applies to Fibonacci!

Now, let's go through an example when the Fibonacci retracement tool fails.

Below is a 4-hour chart of GBP/USD.

Here, you see that the pair has been in downtrend, so you decided to take out your Fibonacci tool to help you spot a good entry point. You use the Swing High at 1.5383, with a swing low at 1.4799.

You see that the pair has been stalling at the 50.0% level for the past couple of candles.

You say to yourself, "Oh man, that 50.0% Fib level! It's holding baby! Time to short this sucka!"

You short at market and start day dreaming that you'll be driving down Rodeo Drive in your new Maserati with Scarlett Johansson (or if you're a lady trader, Robert Pattinson) in the passenger seat...

Now, if you really did put an order at that level, not only would your dreams go up in smoke, but your account would take a serious hit if you didn't manage your risk properly!

Take a look at what happened.

It turns out that that Swing Low was the bottom of the downtrend and market began to rally above the Swing High point.

What's the lesson here?

While Fibonacci levels give you a higher probability of success, like other technical tools, they don't always work. You don't know if price will reverse to the 38.2% level before resuming the trend.

Sometimes it may hit 50.0% or the 61.8% levels before turning around. Heck, sometimes price will just ignore Mr. Fibonacci and blow past all the levels just like how Lebron James bullies his way through the lane with sheer force.

Remember, the market will not always resume its uptrend after finding temporary support or resistance, but instead continue to go past the recent Swing High or Low.

Another common problem in using the Fibonacci tool is determining which Swing Low and Swing High to use.

People look at charts differently, look at different time frames, and have their own fundamental biases. It is likely that Stephen from Pipbuktu and the girl from Pipanema have different ideas of where the Swing High and Swing Low points should be.

The bottom line is that there is no absolute right way to do it, especially when the trend on the chart isn't so clear. Sometimes it becomes a guessing game.

That's why you need to hone your skills and combine the Fibonacci tool with other tools in your forex toolbox to help give you a higher probability of success.

In the next lesson, we'll show you how to use the Fibonacci tool in combination with other forms of support and resistance levels and candlesticks.

Combining Fibs with Support and Resistance

Like we said in the previous section, using Fibonacci levels can be very subjective. However, there are ways that you can help tilt the odds in your favor.

While the Fibonacci tool is extremely useful, it shouldn't be used all by its lonesome self.

It's kinda like comparing it to NBA superstar Kobe Bryant. Kobe is one of the greatest basketball players of all time, but even he couldn't win those titles by himself. He needs some backup.

Similarly, the Fibonacci tool should be used in combination with other tools. In this section, let's take what you've learned so far and try to combine them to help us spot some sweet trade setups.

Are y'all ready? Let's get this pip show on the road!

One of the best ways to use the Fibonacci tool is to spot potential <u>support and resistance</u> levels and see if they line up with Fibonacci retracement levels.

If Fib levels are already support and resistance levels, and you combine them with other price areas that a lot of other traders are watching, then the chances of price bouncing from those areas are much higher.

Let's look at an example of how you can combine support and resistance levels with Fib levels. Below is a daily chart of USD/CHF.


As you can see, it's been on an uptrend recently. Look at all those green candles! You decide that you want to get in on this long USD/CHF bandwagon.

But the question is, "When do you enter?" You bust out the Fibonacci tool, using the low at 1.0132 on January 11 for the Swing Low and the high at 1.0899 on February 19 for the Swing High.

Now your chart looks pretty sweet with all those Fib levels.
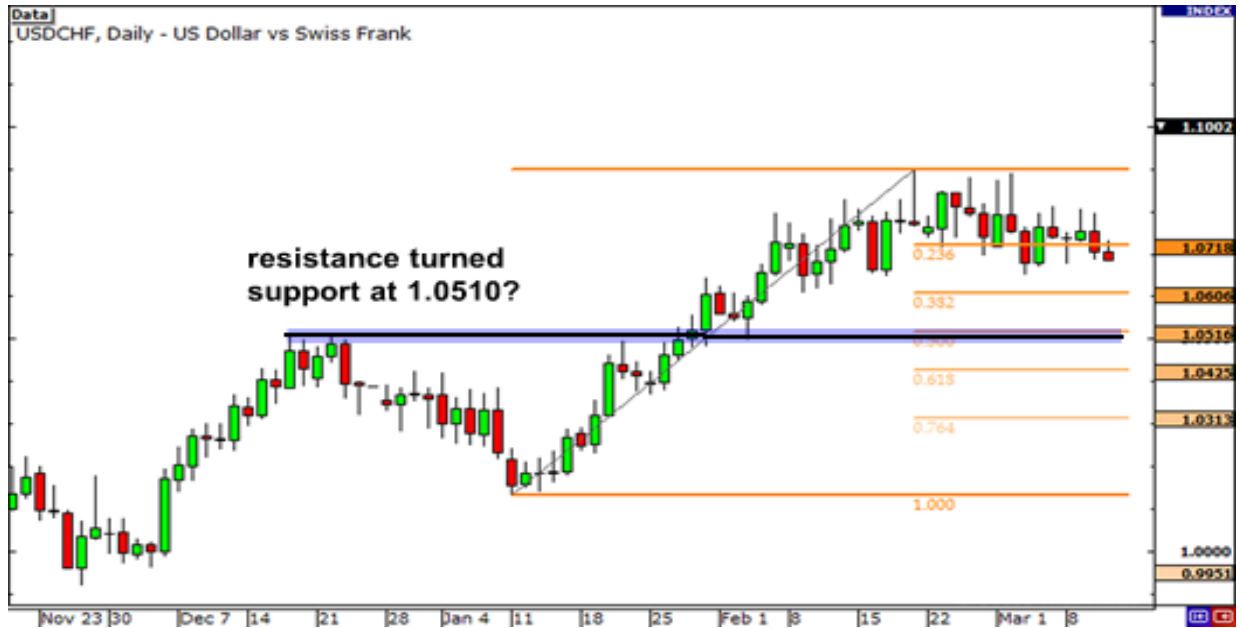
Now that we have a framework to increase our probability of finding solid entry, we can answer the question "Where should you enter?"

You look back a little bit and you see that the 1.0510 price was good resistance level in the past and it just happens to line up with the 50.0% Fib retracement level. Now that it's broken, it could turn into support and be a good place to buy.
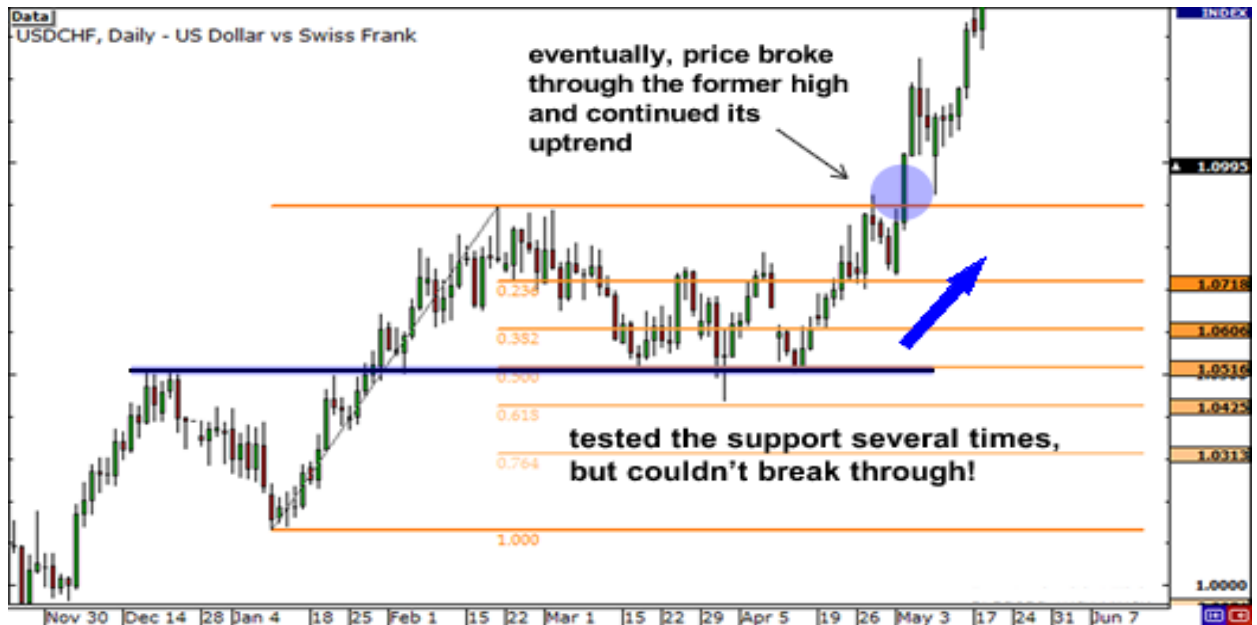
If you did set an order somewhere around the 50.0% Fib level, you'd be a pretty happy camper!

There would have been some pretty tense moments, especially on the second test of the support level on April 1. Price tried to pierce through the support level, but failed to close below it. Eventually, the pair broke past the Swing High and resumed its uptrend.

You can do the same setup on a downtrend as well. The point is you should look for price levels that seem to have been areas of interest in the past. If you think about it, there's a higher chance that price will bounce from these levels.

Why?

First, as we discussed in Grade 1, previous support or resistance levels would be good areas to buy or sell because other traders will also be eyeing these levels like a hawk.

Second, since we know that a lot of traders also use the Fibonacci tool, they may be looking to jump in on these Fib levels themselves.

With traders looking at the same support and resistance levels, there's a good chance that there are a ton of orders at those price levels.

While there's no guarantee that price will bounce from those levels, at least you can be more confident about your trade. After all, there is strength in numbers!

Remember that trading is all about probabilities. If you stick to those higher probability trades, then there's a better chance of coming out ahead in the long run.

Combining Fibs with Trend Lines

Another good tool to combine with the Fibonacci tool is trend line analysis. After all, Fibonacci levels work best when the market is trending, so this makes a lot of sense!

Remember that whenever a pair is in a downtrend or uptrend, traders use Fibonacci retracement levels as a way to get in on the trend. So why not look for levels where Fib levels line up right smack with the trend?

Here's a 1-hour chart of AUD/JPY. As you can see, price has been respecting a short term rising trend line over the past couple of days.

You think to yourself, "Hmm, that's a sweet uptrend right there. I wanna buy AUD/JPY, even if it's just for a short term trade. I think I'll buy once the pair hits the trend line again."

Before you do that though, why don't you reach for your forex tool box and get that Fibonacci tool out? Let's see if we can get a more exact entry price.
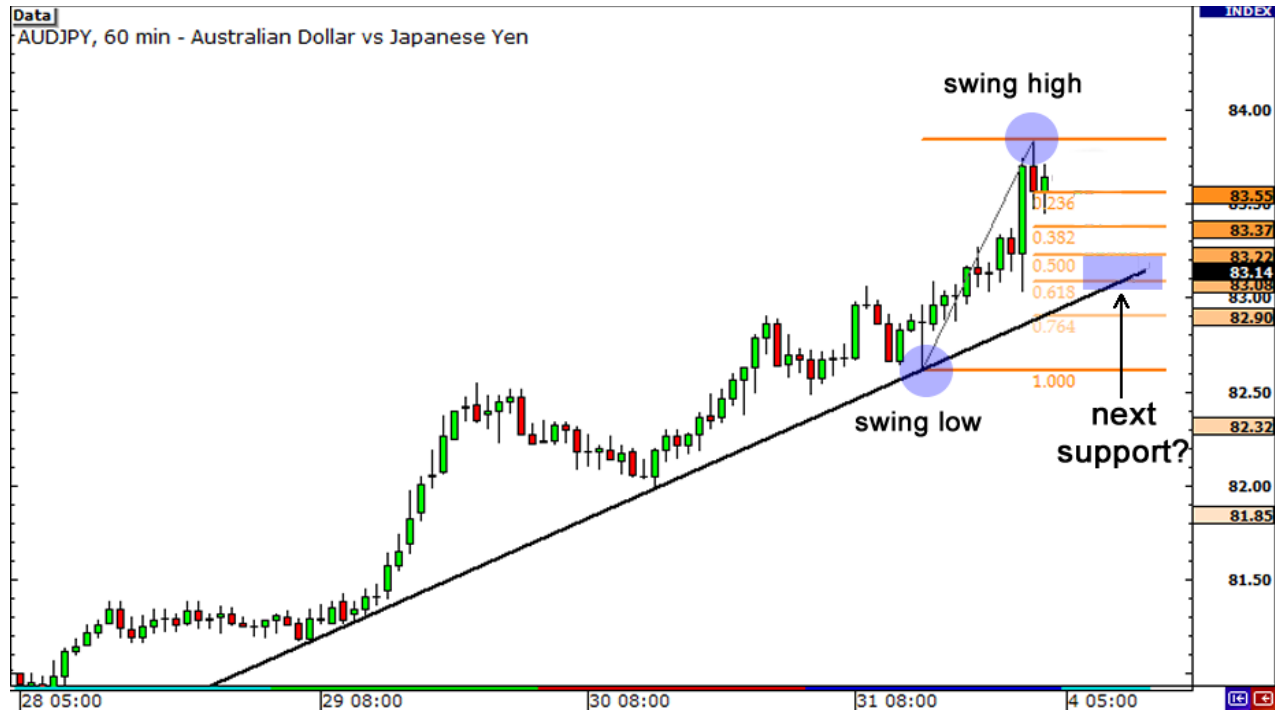
Here we plotted the Fibonacci retracement levels by using the Swing low at 82.61 and the Swing High at 83.84.

Notice how the 50.0% and 61.8% Fib levels are intersected by the rising trend line.

Could these levels serve as potential support levels? There's only one way to find out!
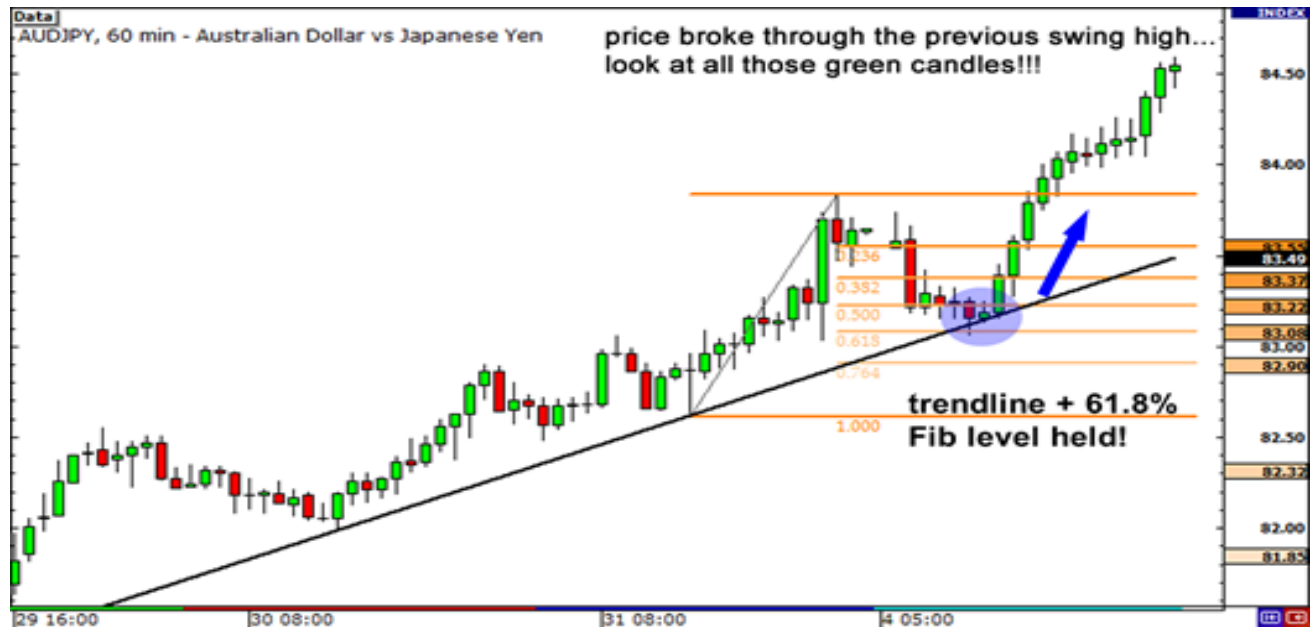
Guess what? The 61.8% Fib level held, as price bounced there before heading back up. If you had set some orders at that level, you would have had a perfect entry!

A couple of hours after touching the trend line, price zoomed up like Astroboy on Red Bull, bursting through the Swing High.

Aren't you glad you've got this in your forex toolbox now?

As you can see, it does pay to make use of the Fibonacci tool, even if you're planning to enter on a retest of the trend line. The combination of both a diagonal and a horizontal support or resistance level could mean that other traders are eying those levels as well.

Take note though, as with other drawing tools, drawing trend lines can also get pretty subjective.

You don't know exactly how other traders are drawing them, but you can count on one thing - that there's a trend!

If you see that a trend is developing, you should be looking for ways to go long to give you a better chance of a profitable trade. You can use the Fibonacci tool to help you find potential entry points.

Combining Fibs with Candlesticks

If you've been paying attention in class, you'd know by now that you can combine the Fibonacci tool with support and resistance levels and trend lines to create a simple but super awesome trading strategy.

But we ain't done yet! In this lesson, we're going to teach you how to combine the Fibonacci tool with your knowledge of Japanese candlestick patterns that you learned in Grade 2.

In combining the Fibonacci tool with candlestick patterns, we are actually looking for exhaustive candlesticks. If you can tell when buying or selling pressure is exhausted, it can give you a clue of when price may continue trending.

We here at BabyPips.com like to call them "Fibonacci Candlesticks," or "Fib Sticks" for short. Pretty catchy, eh? Let's take a look at an example to make this clearer. Below is a 1-hour chart of EUR/USD.

The pair seems to have been in a downtrend the past week, but the move seems to have paused for a bit. Will there be a chance to get in on this downtrend? You know what this means. It's time to take the Fibonacci tool and get to work!

As you can see from the chart, we've set our Swing High at 1.3364 on March 3, with the Swing Low at 1.2523 on March 6.

Since it's a Friday, you decided to just chill out, take an early day off, and decide when you wanna enter once you see the charts after the weekend.

Whoa! By the time you popped open your charts, you see that EUR/USD has shot up quite a bit from its Friday closing price.

While the 50.0% Fib level held for a bit, buyers eventually took the pair higher. You decide to wait and see whether the 61.8% Fib level holds. After all, the last candle was pretty bullish! Who knows, price just might keep shooting up!

Well, will you look at that? A long legged doji has formed right smack on the 61.8% Fib level. If you paid attention in Grade 2, you'd know that this is an "exhaustive candle." Has buying pressure died down? Is resistance at the Fib level holding? It's possible. Other traders were probably eyeing that Fib level as well.

Is it time to short? You can never know for sure (which is why risk management is so important), but the probability of a reversal looks pretty darn good!

If you had shorted right after that doji had formed, you could have made some serious profits. Right after the doji, price stalled for a bit before heading straight down. Take a look at all those red candles! It seems that buyers were indeed pretty tired, which allowed sellers to jump back in and take control. Eventually, price went all the way back down to the Swing Low. That was a move of about 500 pips! That could've been your trade of the year!

Looking for "Fib Sticks" can be really useful, as they can signal whether a Fib level will hold.

If it seems that price is stalling on a Fib level, chances are that other traders may have put some orders at those levels. This would act as more confirmation that there is indeed some resistance or support at that price.

Another nice thing about Fib Sticks is that you don't need to place limit orders at the Fib levels. You may have some concerns whether the support or resistance will hold since we are looking at a "zone" and not necessarily specific levels.

This is where you can use your knowledge of candlestick formations.

You could wait for a Fib Stick to form right below or above a Fib level to give you more confirmation on whether you should put in an order.

If a Fib stick does form, you can just enter a trade at market price since you now have more confirmation that level could be holding.

Fibonacci Extensions

The next use of Fibonacci will be using them to find targets.

Gotta always keep in mind "Zombieland Rules of Survival #22" - When in doubt, know your way out! Let's start with an example in an uptrend.

In an uptrend, the general idea is to take profits on a long trade at a Fibonacci Price Extension Level. You determine the Fibonacci extension levels by using three mouse clicks.

First, click on a significant Swing Low, then drag your cursor and click on the most recent Swing High. Finally, drag your cursor back down and click on any of the retracement levels.

This will display each of the Price Extension Levels showing both the ratio and corresponding price levels. Pretty neat, huh?

Let's go back to that example with the USD/CHF chart we showed you in the previous lesson.
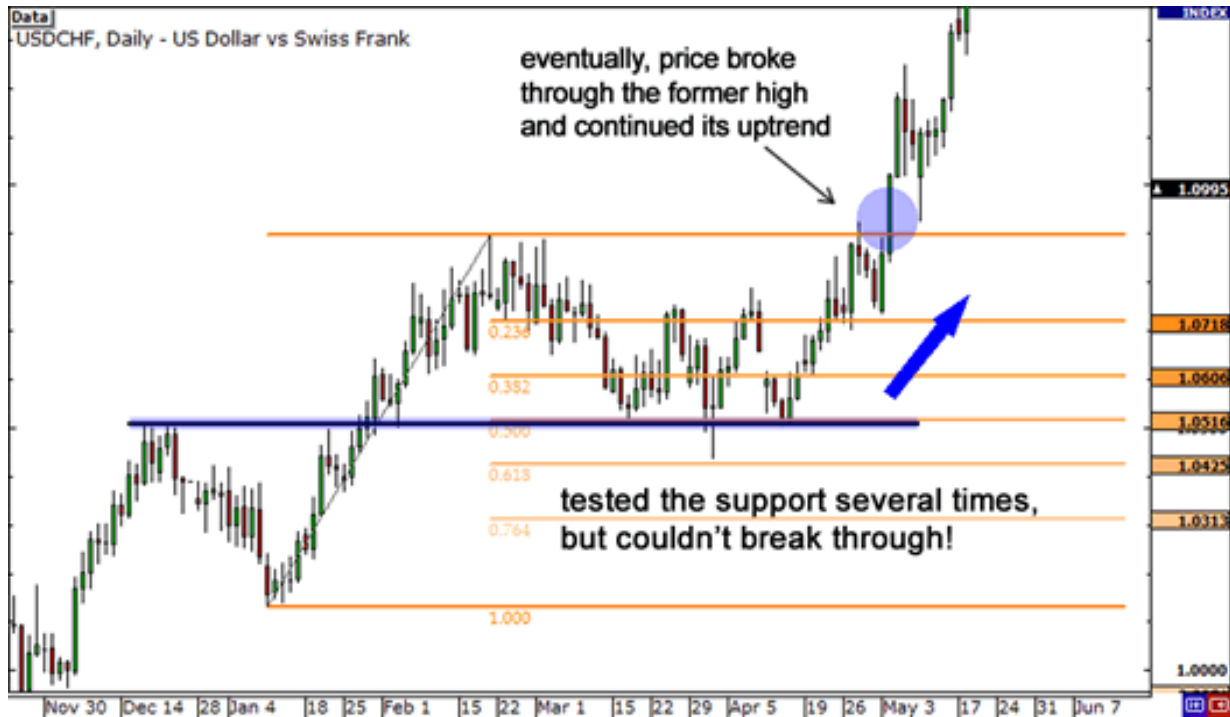
The 50.0% Fib level held strongly as support and, after three tests, the pair finally resumed its uptrend. In the chart above, you can even see price rise above the previous Swing High.

Let's pop on the Fibonacci extension tool to see where would have been a good place to take off some profits.

Here's a recap of what happened after the retracement Swing Low occurred:
- Price rallied all the way to the 61.8% level, which lined up closely with the previous Swing High.
- It fell back to the 38.2% level, where it found support
- Price then rallied and found resistance at the 100% level.
- A couple of days later, price rallied yet again before finding resistance at the 161.8% level.
  As you can see from the example, the 61.8%, 100% and 161.8% levels all would have been good places to take off some profits.

Now, let's take a look at an example of using Fibonacci extension levels in a downtrend. In a downtrend, the general idea is to take profits on a short trade at a Fibonacci extension level since the market often finds support at these levels. Let's take another look at that downtrend on the 1-hour EUR/USD chart we showed you in the Fib Sticks lesson.

Here, we saw a doji form just under the 61.8% Fib level. Price then reversed as sellers jumped back in, and brought price all the way back down to the Swing Low.

Let's put up that Fib Extension tool to see where would have been some good places to take profits had we shorted at the 61.8% retracement level.

Here's what happened after price reversed from the Fibonacci retracement level:

- Price found support at the 38.2% level
- The 50.0% level held as initial support, then became an area of interest
- The 61.8% level also became an area of interest, before price shot down to test the previous Swing Low
- If you look ahead, you'll find out that the 100% extension level also acted as support
  We could have taken off profits at the 38.2%, 50.0%, or 61.8% levels. All these levels acted as support, possibly because other traders were keeping an eye out for these levels for profit taking as well.

The examples illustrate that price finds at least some temporary support or resistance at the Fibonacci extension levels - not always, but often enough to correctly adjust your position to take profits and manage your risk.
Of course, there are some problems to deal with here.

First, there is no way to know which exact Fibonacci extension level will provide resistance. Any of these levels may or may not act as support or resistance.

Another problem is determining which Swing Low to start from in creating the Fibonacci extension levels.

One way is from the last Swing Low as we did in the examples; another is from the lowest Swing Low of the past 30 bars. Again, the point is that there is no one right way to do it, but with a lot of practice, you'll make better decisions of picking Swing points.

You will have to use your discretion in using the Fibonacci extension tool. You will have to judge how much longer the trend will continue. Later on, we will teach you methods to help you determine the strength of a trend. For now, let's move on to stop loss placement!

Placing Stops with Fibs

Probably just as important as knowing where to enter or take off profits is knowing where to place your stop loss.

You can't just enter a trade based on Fib levels without having a clue where to exit. Your account will just go up in flames and you will forever blame Fibonacci, cursing his name in Italian.

In this lesson, you'll learn a couple of techniques to set your stops when you decide to use them trusty Fib levels. These are simple ways to set your stop and the rationale behind each method.

The first method is to set your stop just past the next Fibonacci level.

If you were planning to enter at the 38.2% Fib level, then you would place your stop beyond the 50.0% level. If you felt like the 50.0% level would hold, then you'd put your stop past the 61.8% level and so on and so forth. Simple, right?

Let's take another look at that 4-hour EUR/USD chart we showed you back in the Fibonacci retracement lesson.

If you had shorted at the 50.0%, you could have placed your stop loss order just past the 61.8% Fib level.

The reasoning behind this method of setting stops is that you believed that the 50.0% level would hold as a resistance point. Therefore, if price were to rise beyond this point, your trade idea would be invalidated.

The problem with this method of setting stops is that it is entirely dependent on you having a perfect entry.

Setting a stop just past the next Fibonacci retracement level assumes that you are really confident that the support or resistance area will hold. And, as we pointed out earlier, using drawing tools isn't an exact science.

The market might shoot up, hit your stop, and eventually go in your direction. This is usually when we'd go to a corner, and start hitting our head on the wall.

We're just warning you that this might happen, sometimes a few times in a row, so make sure you limit your losses quickly and let your winners run with the trend. It might be best if you used this type of stop placement method for short term, intraday trades.

Now, if you want to be a little safer, another way to set your stops would be to place them past the recent Swing High or Swing Low.

This type of stop loss placement would give your trade more room to breathe and give you a better chance for the market to move in favor of your trade.

If the market price were to surpass the Swing High or Swing Low, it may indicate that a reversal of the trend is already in place. This means that your trade idea or setup is already invalidated and that you're too late to jump in.

Setting larger stop losses would probably be best used for longer term, swing-type trades, and you can also incorporate this into a "scaling in" method, which you will learn later on in this course.
Of course, with a larger stop, you also have to remember to adjust your position size accordingly.

If you tend to trade the same position size, you may incur large losses, especially if you enter at one of the earlier Fib levels.

This can also lead to some unfavorable reward-to-risk ratios, as you may have a wide stop that isn't proportional to your potential reward.

So which way is better?

The truth is, just like in combining the Fibonacci retracement tool with support and resistance, trend lines, and candlesticks to find a better entry, it would be best to use your knowledge of these tools to analyze the current environment to help you pick a good stop loss point.

As much as possible, you shouldn't rely solely on Fib levels as support and resistance points as the basis for stop loss placement.

Remember, stop loss placement isn't a sure thing, but if you can tilt the odds in your favor by combining multiple tools, it could help give you a better exit point, more room for your trade to breathe, and possibly a better reward-to-risk ratio trade.

<u>Summary: Fibonacci</u>
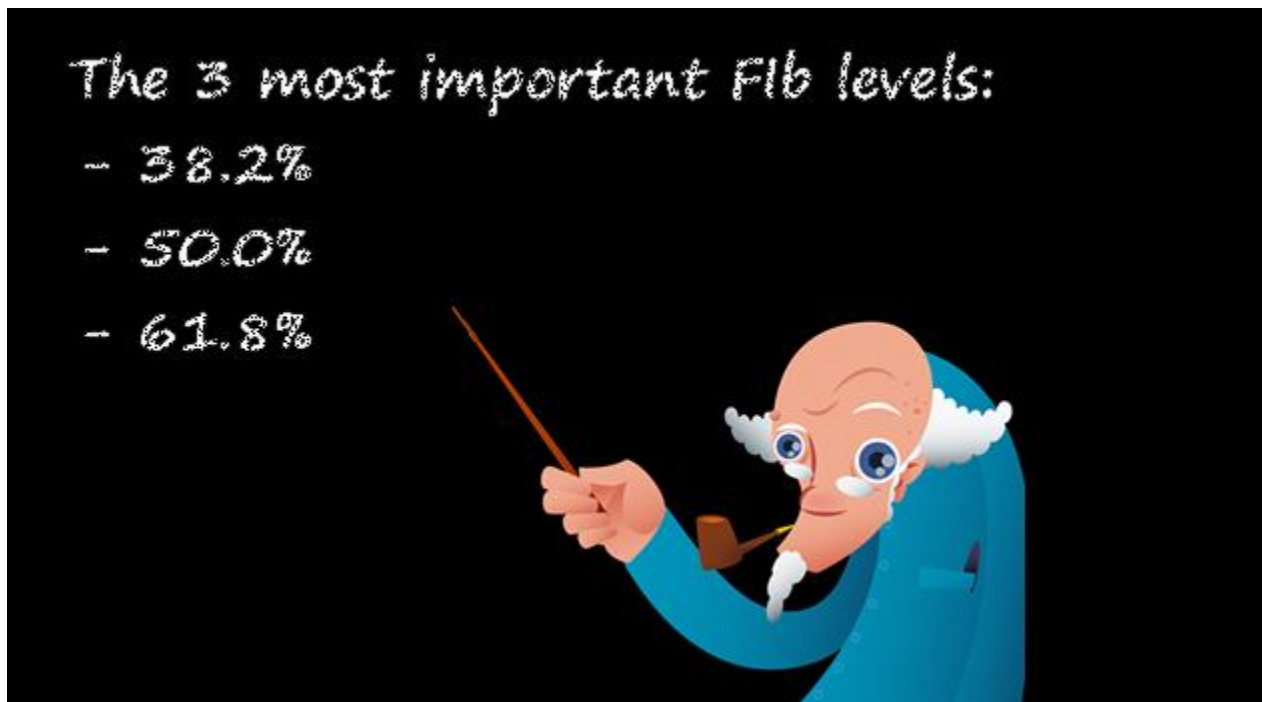
The key Fibonacci retracement levels to keep an eye on are the 23.6%, 38.2%, 50.0%, 61.8%, and 76.4%. The ones that seem to hold the most weight are the 38.2%, 50.0%, and 61.8% levels. These are normally included in the default settings of any Fibonacci retracement software.

If your trading software doesn't have a Fib tool, no worries - we've got a Fibonacci calculator that will do all the work for you!
Traders use the Fibonacci retracement levels as potential **support and resistance**. Since plenty of traders watch these same levels and place buy and sell orders on them to enter trades or place stops, the support and resistance levels may become a self-fulfilling prophecy.
They key Fibonacci extension levels are the 38.2%, 50.0%, 61.8%, 100%, 138.2% and 161.8%.

Traders use the Fibonacci extension levels as potential support and resistance areas to set profit targets. Again, since so many traders are watching these levels and placing buy and sell orders to take profits, this tool tends to work due self-fulfilling expectations.

In order to apply Fibonacci levels to your charts, you'll need to identify Swing High and Swing Low points.

A Swing High is a candlestick with at least two lower highs on both the left and right of itself.

A Swing Low is a candlestick with at least two higher lows on both the left and right of itself.

Because many traders use the Fibonacci tool, those levels tend to become self-fulfilling support and resistance levels or areas of interest.

When using the Fibonacci tool, probability of success could increase when using the Fib tool with other support and resistance levels, trend lines, and candlestick patterns for spotting entry and stop loss points.

http://www.babypips.com/tools/forex-calculators/