Practical Fibonacci Methods For Forex Trading

By Ken Marshall
and
Rob Moubray

Contents

Introduction to Fibonacci Numbers.

The Fibonacci series of numbers are

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

The numbers are calculated simply by adding the two previous numbers together.

E.g. 3 + 5 = 8
5 + 8 = 13
8 + 13 = 21
etc

In forex, the Fibonacci ratios are used extensively to calculate targets for exit points and entry points for trades. These Fibonacci levels are reliable as a large number of professional traders use them, and when this happens the traders, in mass, drive the prices to these levels.

Let's look at how the ratios are derived.

Take four sequential Fibonacci numbers

Eg 13, 21, 34, 55

By dividing one number with another we get the ratios

13/21 = 0.618	or	61.8%
34/55 = 0.618	or	61.8%
34/21 = 1.618	or	161.8%
55/34 = 1.618	or	161.8%
21/55 = 0.382	or	32.8%
13/34 = 0.382	or	32.8%

The square root of 0.618 = 0.786
And the square root of 1.618 = 1.27

In Forex trading the key Fibonacci ratios are

0.382	38.2%
0.50	50%
0.618	61.8%
0.786	78.6% (76.4% is used on Metatrader charts 38.2 x 2 = 76.4% and 1- 34/144 = 0.764) (Price often bounces off an exact 76.4% retracement level and 76.4 is being mentioned by various forex brokers)
1.27	127%
1.618	161.8%
2.618	261.8%

Trading the Fibonacci Levels:

Introduction:

The Fibonacci levels are a very powerful tool in trading forex. They can be traded in isolation or in combination with other signals, for example candlesticks, indicators or chart patterns. In this book we will use confirmation signals for entry and exit points. (Chart Patterns and Candlestick Patterns are covered in more detail in “Guide to Profitable Forex Day Trading” which is available from www.forextechniques.com).

Buy setups include bullish engulfing candlestick, morning star, tweezer bottom, double bottom and a break of the high of an inside bar. Sell setups include bearish engulfing candlestick, evening star, tweezer top, double top and a break of the low of an inside bar

The methodology will be demonstrated using real examples using charts and explanations.

One can apply these methods on any time frame from 5min charts through to weekly charts.

When putting Fibonacci levels on the charts, one must look back on each time frame for significant highs and lows. This may involve looking back days and even weeks. There are traders trading all the different time frames so Fibonacci lines drawn on weekly or monthly charts will affect the market. Convergence of different Fibonacci levels may occur from levels placed on the different time frame charts. Where convergence occurs, the levels become more significant. It is important to look for convergence with Support and Resistance Levels and Trendlines.

Fibonacci Retracements

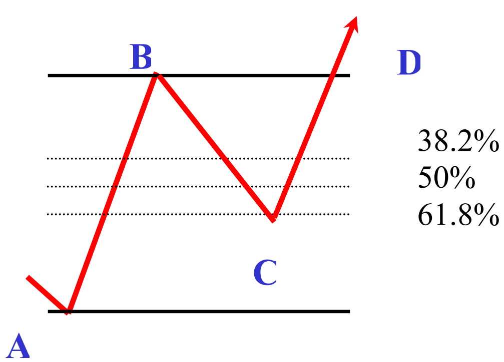
Retracement trading is safer than breakout trading .The main levels to watch are:

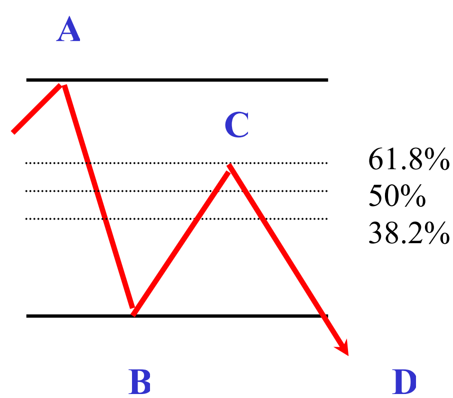
38.2%, 50%, 61.8% and 78.6%. (or 76.4%)

The market will typically retrace after a strong move before continuing .The market won't always hit these levels exactly. For example, price may reverse mid way between 50% and 61.8% sometimes. Price can under shoot or over shoot a Fibonacci level .The 61.8% and 76.4% retracements are very popular levels for the market to retrace to. Watch these levels on the different timescales. It is best to wait for a confirmation signal at or close to point **C** before entering a trade. The difficult part about trading Fibonacci retracements is knowing which level will hold.

For a buy, price should rise from a swing low at point **A** to a swing high at point **B** and retrace to point **C** at a Fibonacci level. A swing low is a **C** bar turning point .The low of the middle bar is the lowest point of the swing.

For a sell, price should drop from a swing high at point **A** to a swing low at point **B** and retrace up to point **C**. Look for intra day highs and lows, daily highs and lows, 2 day highs and lows and 3-5day highs and lows etc.





Candlestick patterns are most reliable near Fibonacci levels and other support and resistance lines. Candlesticks are also good for signaling the end of a retracement.

Double tops and double bottoms often appear at Fibonacci levels e.g. 61.8% retracement or the 1.382% extension.

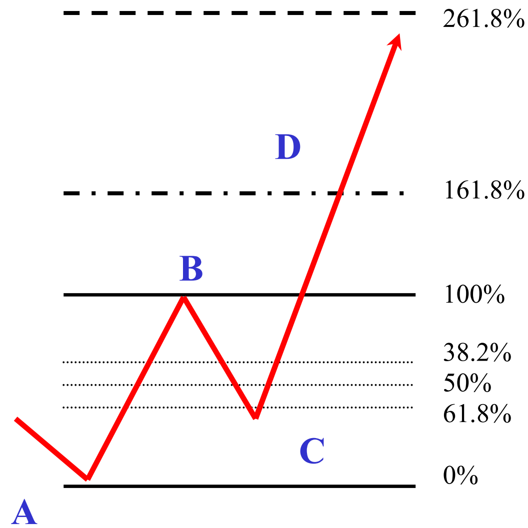
Example of a Sell setup.

Example of a Buy setup

Fibonacci Extensions, Expansions or Projections.

Target point **D** (Profit Objective) and retracement point **C** can be calculated by measuring the number of pips from point **A** to point **B** and multiplying by the factors below:

Fibonacci Target	Formula for points C or D
38.2%	(B-A) x 0.382 - B = C
50%	(B-A) x 0.5 - B = C
61.8%	(B-A) x 0.618 - B = C
78.6%	(B-A) x 0.786 - B = C
100%	(B-A) x A + A= D
127%	(B-A) x 1.27 + A= D
161.8%	(B-A) x 1.618 + A = D
200%	(B-A) x B + A = D
261.8%	(B-A) x 2.618 + A= D



Most charting software has these extensions available so calculations are not needed.

For a retracement, left click on point **A**, drag the line to point **B**, then release the mouse. For an extension (projection), left click on point **B**, hold, and drag the line to point **A** and release.

Commonly, 61.8% retracements go to at least the 161.8% projection. Sometimes the 100%, 200% and 261.8% extensions come into play.

A lot of money has been made using the **ABCD** (also called 1234) patterns using retracements to enter and extensions to exit. Enter near point **C** and exit at point **D**.

The best way to determine whether a move is a pullback (retracement) or not is to determine whether the price is moving in the direction of the main trend. If the price is moving against the main trend watch for reversals at the 38.2%, 50%, 61.8% or 78.6% Fibonacci Lines. Sometimes the price will consolidate at one or each of the levels before continuing. Hence it is important to wait for a confirmation signal before re-entering in the reverse direction.

The chart below illustrates this. In the move down from **A** the GBPUSD consolidated at **B** the 38.2% retracement. Note there is no reversal signal here and that the GBPUSD then continued retracing until it reached the 61.8% level. Here there is a Morning Star Candlestick Pattern and a Support line providing a reversal signal at point **C** and convergence with 61.8% retracement.

Fibonacci Convergence or Confluence

Take Fibonacci retracements and projections from a number of different lows or highs to find a level where 2 or more retracements/projections are at the same level. This will give a level with a strong possibility of a turning point.

Convergence is when the coincidence of 2 or more Fibonacci price relationships comes together with a relatively tight range.

For example, a Fibonacci convergence is where a 38.2% off one high and 50% off another and a 61.8% off another, converging on the same area of the chart. A Fibonacci extension can converge with a Fibonacci retracement creating a bounce.

Two Fibonacci retracements have been drawn on the chart above from two different low points. Three cluster points are drawn:

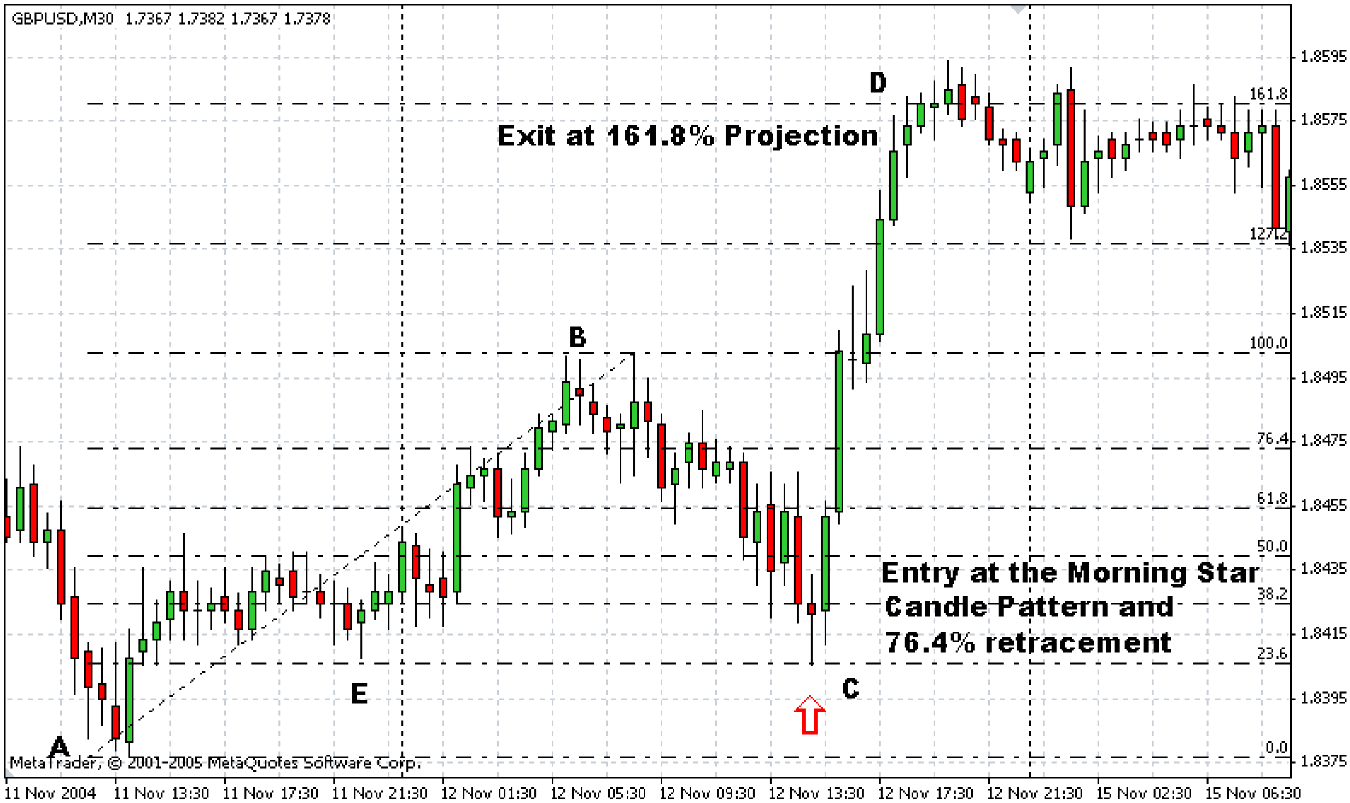
A - where the 61.8% and 32.8% retracements coincide

B - where the 38.2% and 23.6% retracements coincide

C - where the 61.8% and 100% retracements coincide.

Trade Examples:

Example 1.
GBPUSD 30 min chart.

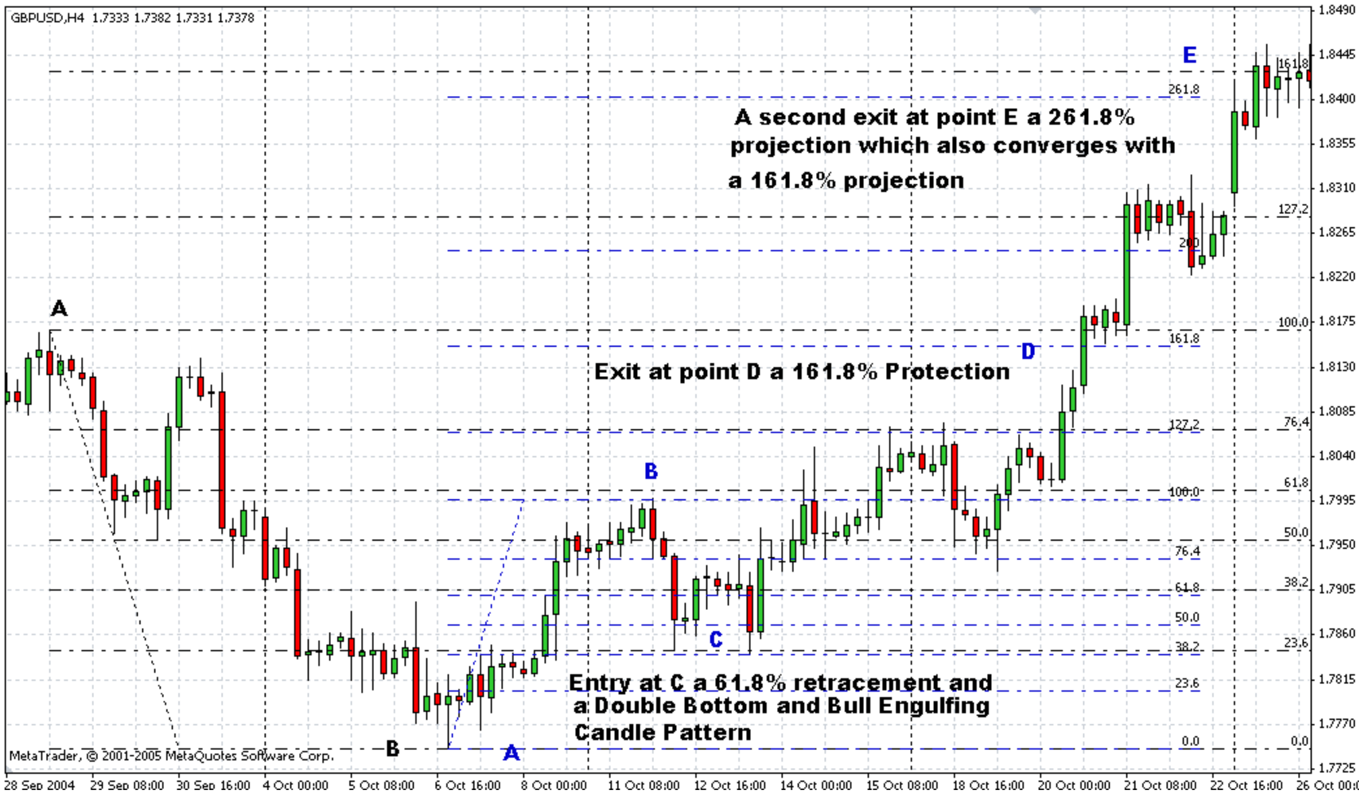


In the chart above, we have a classic ABCD pattern where the entry point is at point C, a 76.4% retracement and a Morning Star Candlestick Pattern.

The point C was at 76.4% and not 61.8% (76.4% is popular on the GBPUSD), but by waiting for the candlestick pattern i.e. the Morning Star we found confirmation of the reversal and a good trade to point D the 161.8% projection.

Note also the point C was close to a Double Bottom with point E and formed a Higher Low Pattern with point 1

Example 2
GBPUSD 4hr



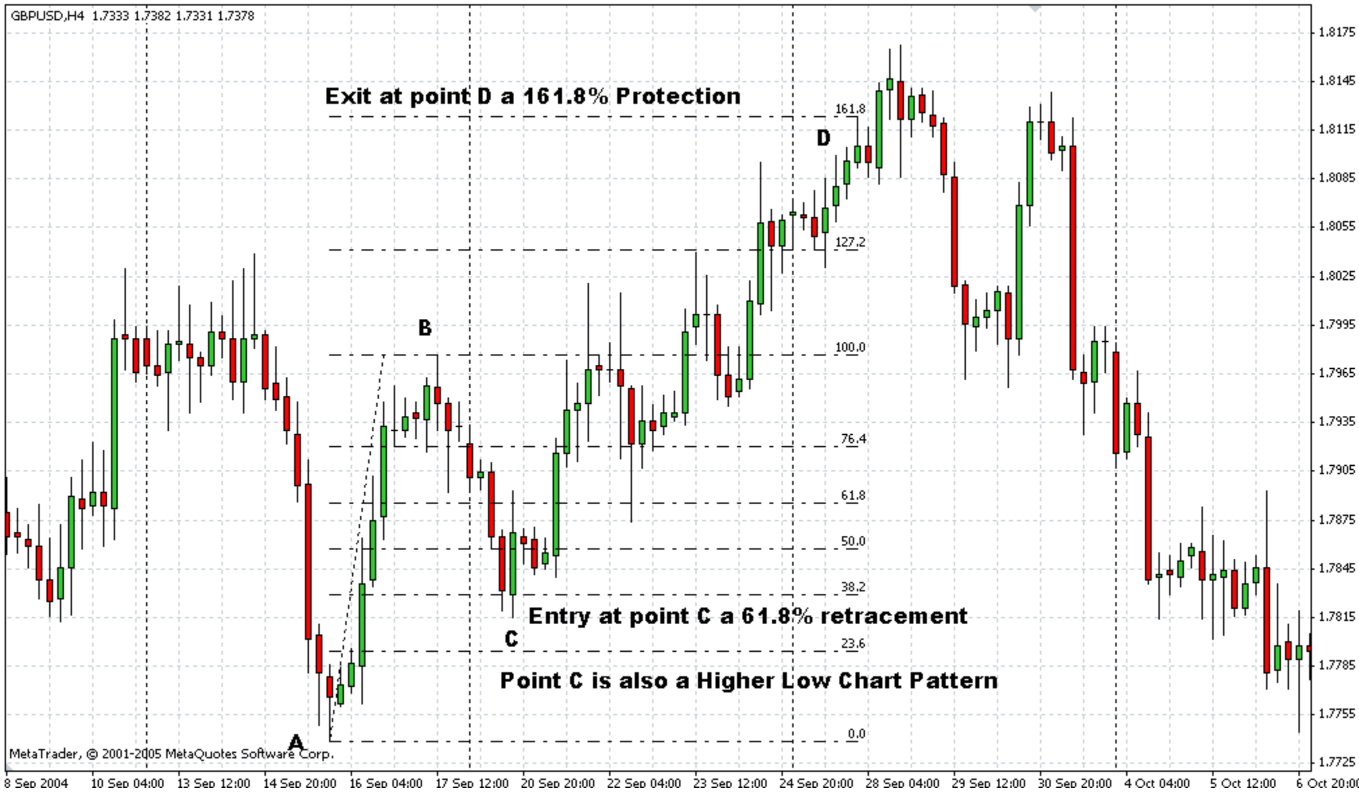
Looking at the GBPUSD 4 hour chart we have the two trade examples:

1. Entry at Point **B** on the Bull Engulfing candle with a Target Exit at the 61.8% retracement of the move **A** to **B**

2. The **ABCD** pattern with entry at **C** being the 61.8 % retracement of the move **A** to **B** confirmed by the double bottom at point **C** or the Bull Engulfing candle above **C**. The trade exits are at 161.8 % projection at **D** or the 261.8% at **E**. Either exit gave very good trades. Note there is a Fibonacci convergence at point **E**.

   Note that point **D** also forms a Double Top with point **A**. This convergence of the Double Top and the 161.8% projection increases the reliability of the exit point.

Example 3
GBPUSD 4 Hour



Again using the **ABCD** pattern another good long term trade with entry from the 61.8% retracement confirmed by a Higher Low Chart Pattern.

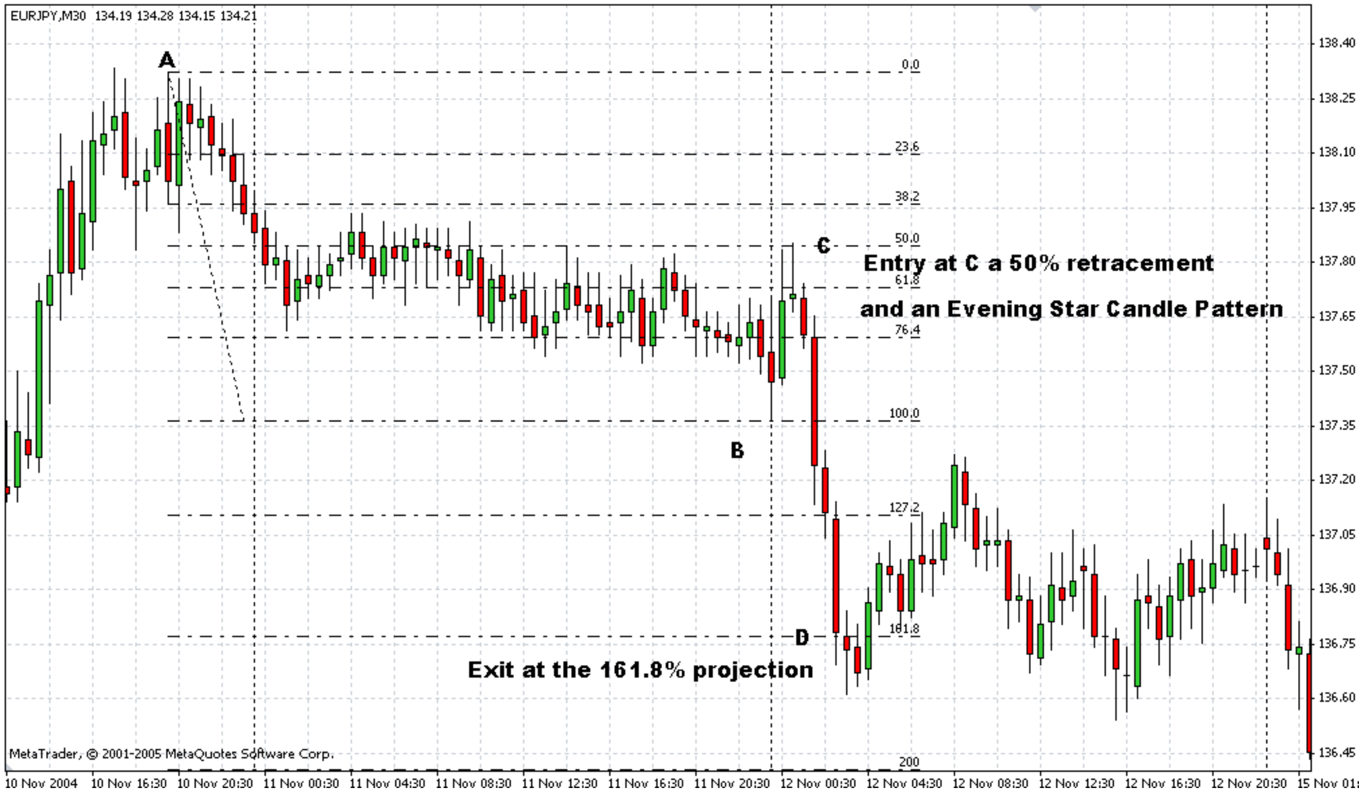
Exit at point **D** the 161.8% Projection of the move from point **A** to point **B**...

Example 4
GBPUSD 4 Hour

In this example, the candlestick pattern is a Bearish Rejection Pattern which is a convergence of candles at a resistance line, a 50% retracement. Note how the currency pair was rejected at this level.

The first target point 161.8% of the move from point **A** to point **B** at **D** provided a small support where the price pulled back a small way before continuing down. This was caused by traders exiting the trade at and around that point.

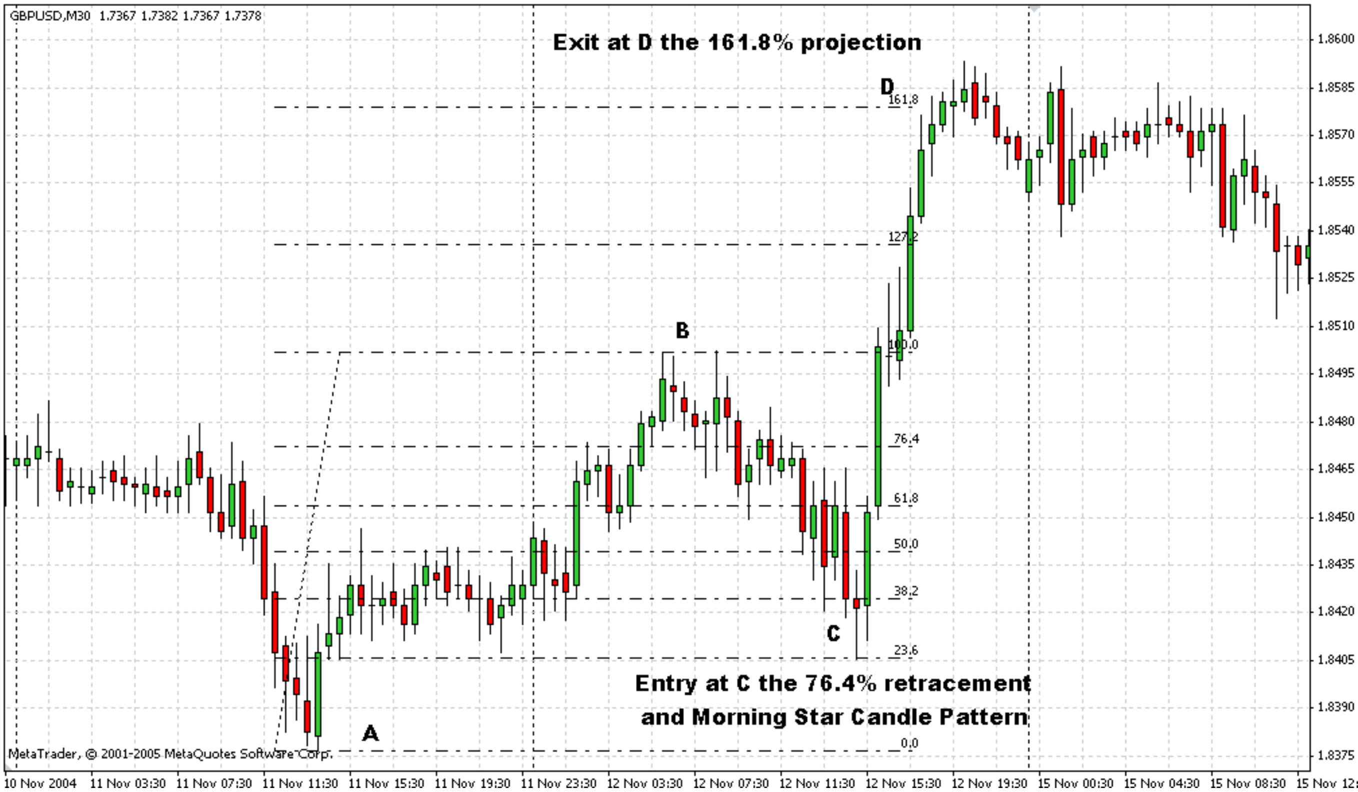
Example 5
EURJPY 30 minute



This example is a trade off the 30 minute chart. Note how the currency pair set up by retracing to point **C** which happened to be a 50% retracement point before continuing short. This could also be called a “bull trap” as a trader could have entered long at **B**, only to find the trade rapidly reversed. It is important to watch the price action on and around the major Fibonacci levels. Because the trend was down, good traders would have waited for the reversal at **C** before placing short trades.

Note how the strong short move stopped close to the 161.8% projection of the move from point **A** to point **B**. This is where most of the traders took their profits, causing a pullback.

Example 6
GBPUSD 30 minute



This is a similar example to the previous example with the retest of the point **A** only reaching 76.4% at point **C**. Again point **C** provided a good entry point for a long trade. A Morning Star Candle Pattern provides the entry confirmation.

Example 7
GBPUSD 1 Hour

In this example we see how a good trade can be taken from the Double Top / Evening Star at point **B** with target 61.8% retracement.

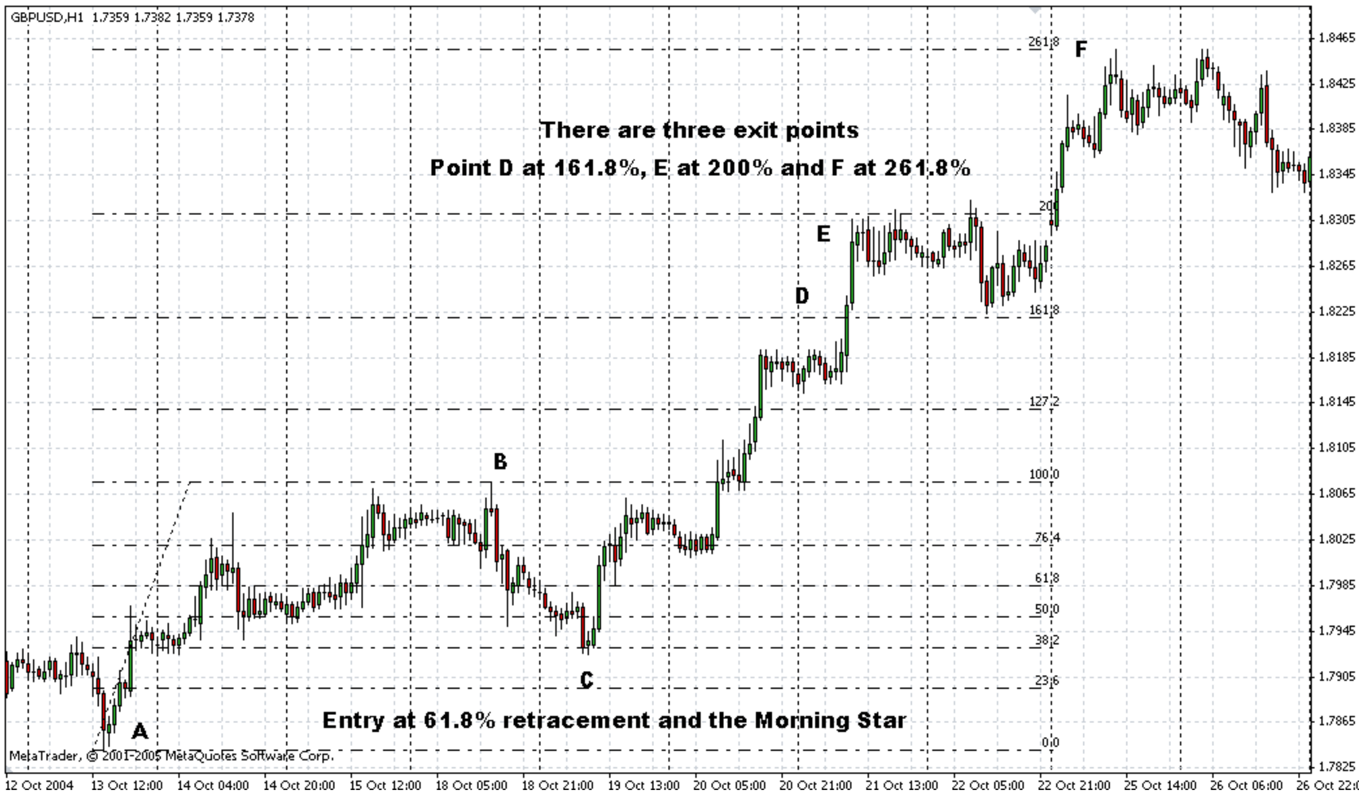
The chart above shows how effective the 61.8% Fibonacci retracement is. A long trade placed just above the "Point **C**" provided a very profitable trade. Entry is confirmed by the presence of a Morning Star Candlestick Pattern at "point **C**" and the convergence of the 61.8% retracement with a Support Line.

The Exit Points are shown on the following chart.

Note the area of consolidation / retracement as the GBP retraces from point **B** down to **C** at 50% before continuing to point **C** at 61.8%.

Also notice how the GBP retested point **B** (forming a Double Top and Evening Star) before retracing. This retesting of previous Highs and Lows happens frequently. (Forming Double Tops / Bottoms or Lower Highs or Higher Lows)

Example 8
GBPUSD 1 hour



The chart above is the same as the previous chart, but shows the Fibonacci projections. A long trade placed at "**C**" with targets of:

1. 161.8 at "**D**"
2. or 200% at "**E**"
3. or even 261.8% at "**F**"

provide profitable trades. Note how the price has consolidated or turned at the major Fibonacci levels.

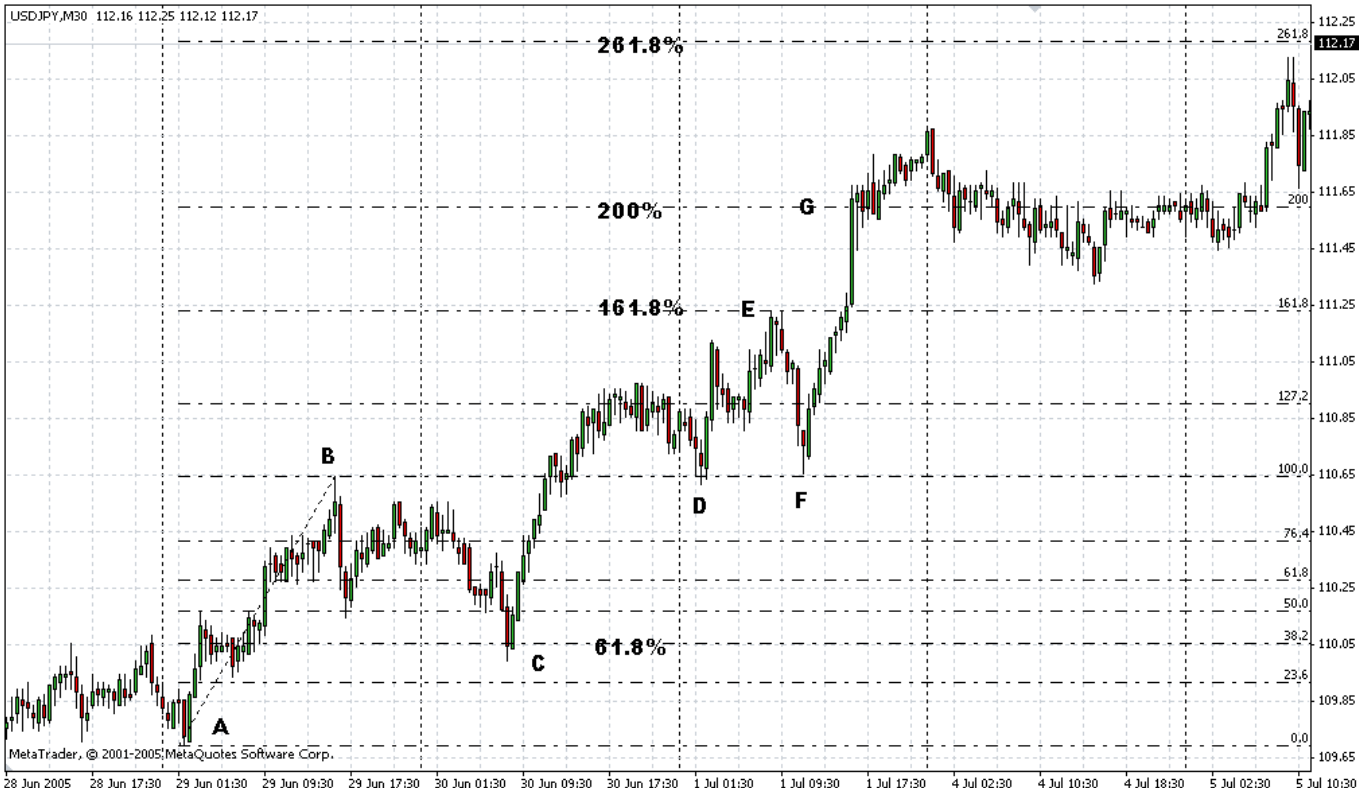
The Fibonacci levels can be used on any time frame and the concept is the same. Hence they can be used for position trading through to intra day trading.

Note the consolidation areas at or close to major Fibonacci levels. There is a consolidation just below the 161.8% projection level. The different charting software and price feeds do not always give exactly the same Fibonacci levels. This often happens and traders need to be alert for this and respond accordingly.

Example 9
GBPUSD 4 Hour

Note the big retracement at point **B**, so again the trader needs to be alert at these critical levels. In this case, if the trader was aiming for the 76.4% retracement, the presence of the bearish engulfing candle at **B** was the signal to close the trade and reassess the market.

Example 10
EURUSD 15 minute



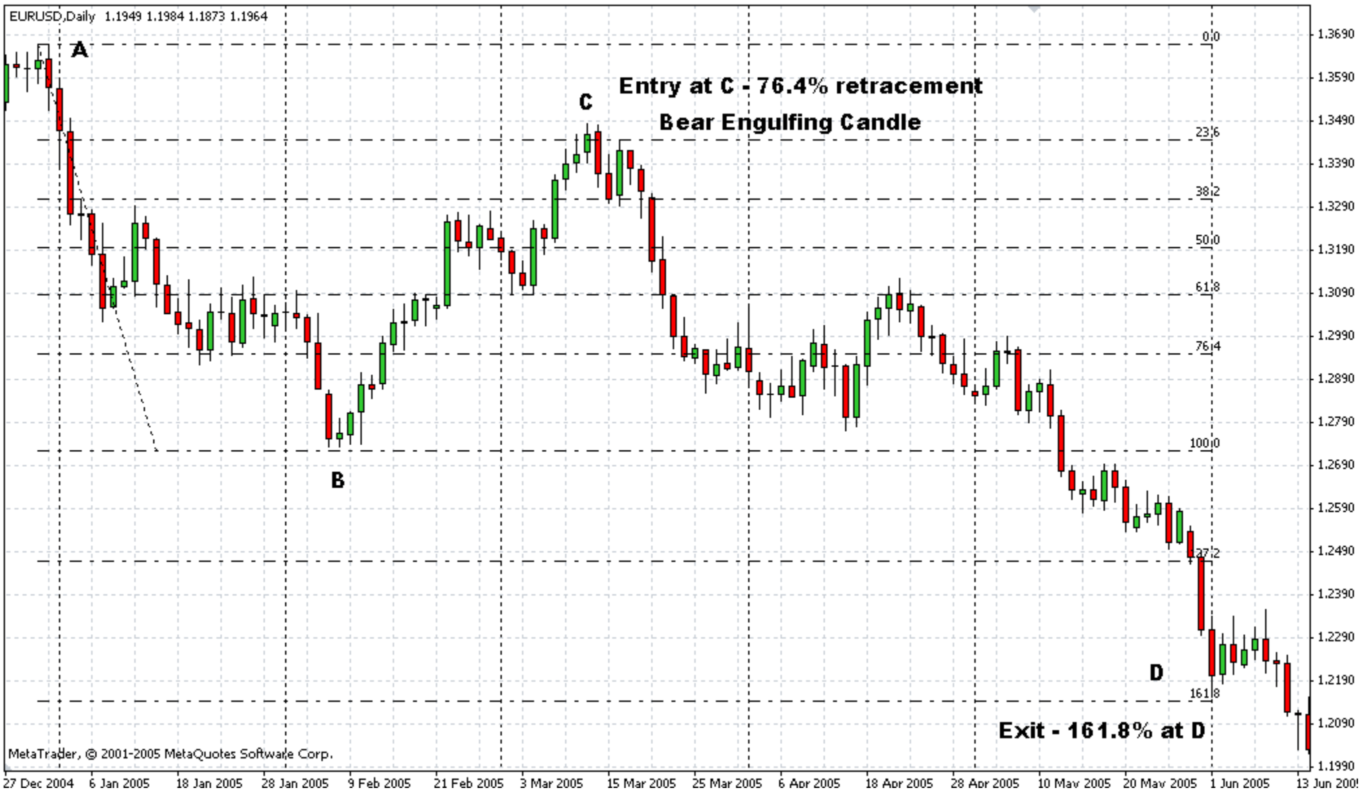
The example above shows how powerful the Fibonacci Levels are in trading.

First we have the standard ABCD with the C point at the 61.8% retracement.

The price went up to the 127.2% projection then retraced to point D the resistance at B turned support. The price then rose to the 161.8% projection at E then retraced to F the retest of the support at D. The price then rose to the 200% at G where it consolidated for over a day. Later going up to just short of the 261.8% projection.

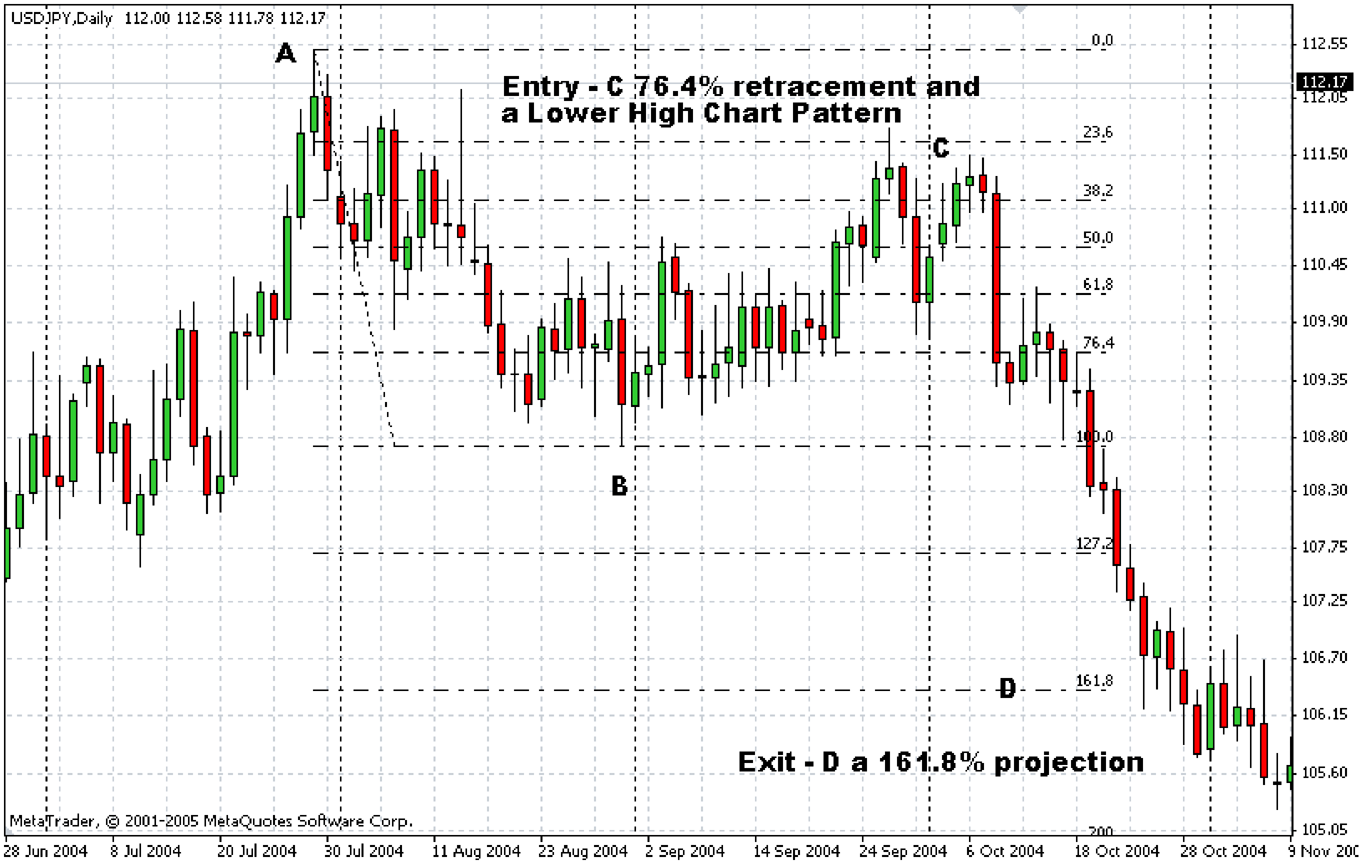
The important point here is that the market moves to definite targets, and the secret is to be able to find these targets in advance. We have found that the Fibonacci levels are very useful in determining these targets in advance.

Example 11
EURUSD Daily Chart



This example illustrates how you can use the Fibonacci methods on the daily charts in the same way one uses them on the smaller timeframes.

Example 12
USDJPY Daily

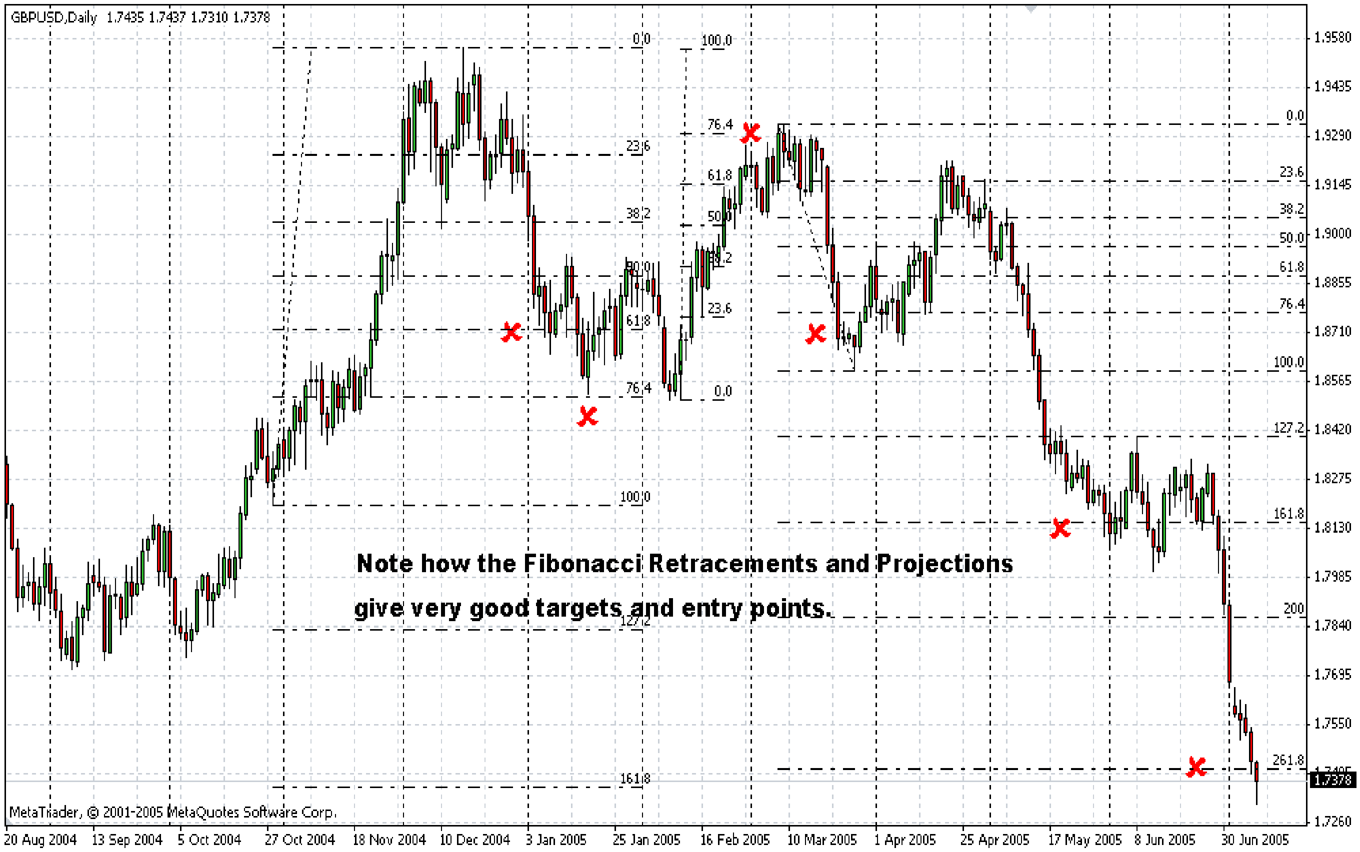


Another example of the Fibonacci methodology on the daily chart.

There are two good entry signals at **C**

- Lower High Chart Pattern
- Evening Star Candle Pattern

Example 13
GBPUSD Daily Chart.

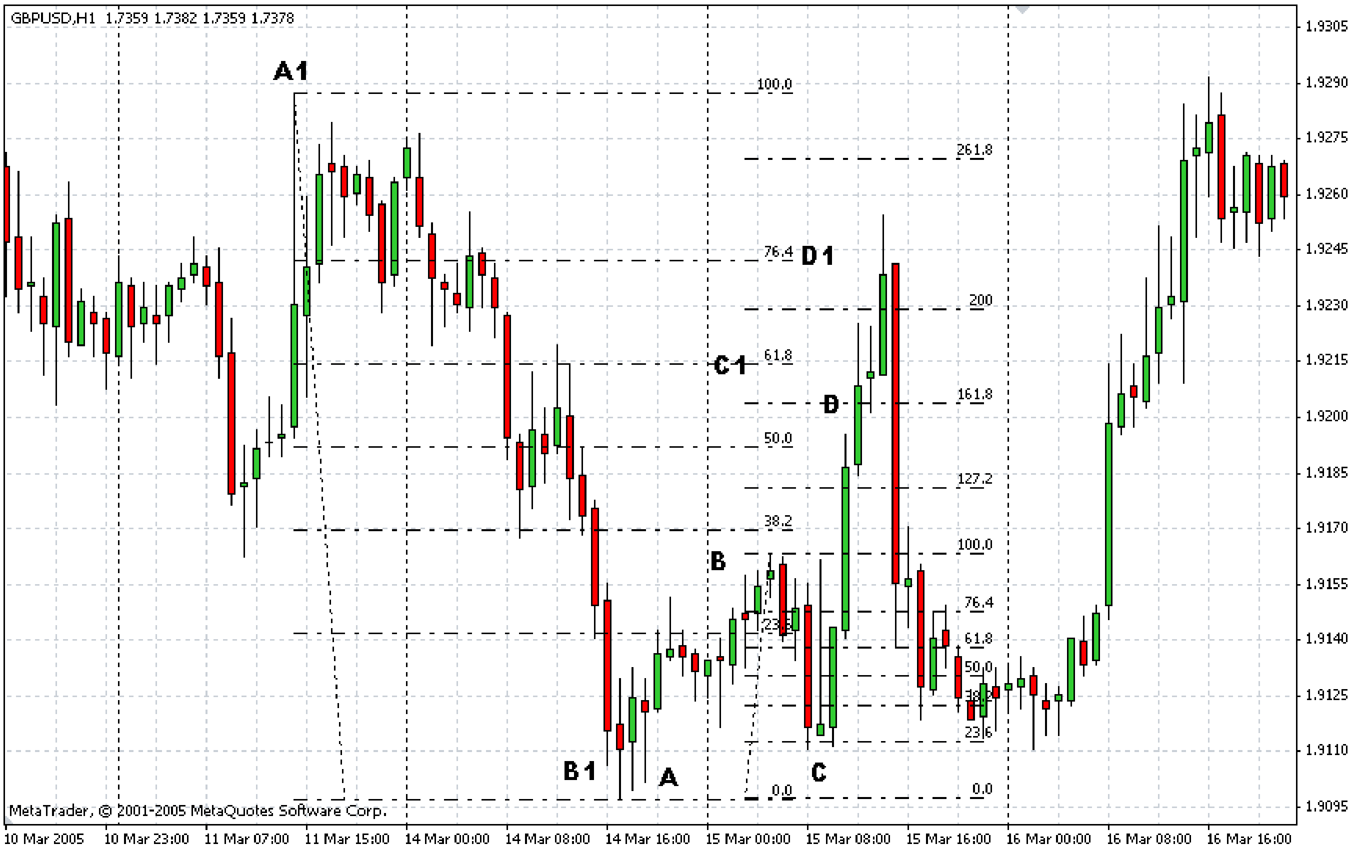


Above is an example of how reliable the Fibonacci levels are.

The GBPUSD frequently retraces to the 76.4% level.

Note how the Fibonacci is effective on all timeframes, hence if you are trading the shorter timeframes it is very important to note the Fibonacci levels on the higher timeframe as these can warn of major trend changes.

Example 14
GBPUSD 1 Hour Chart

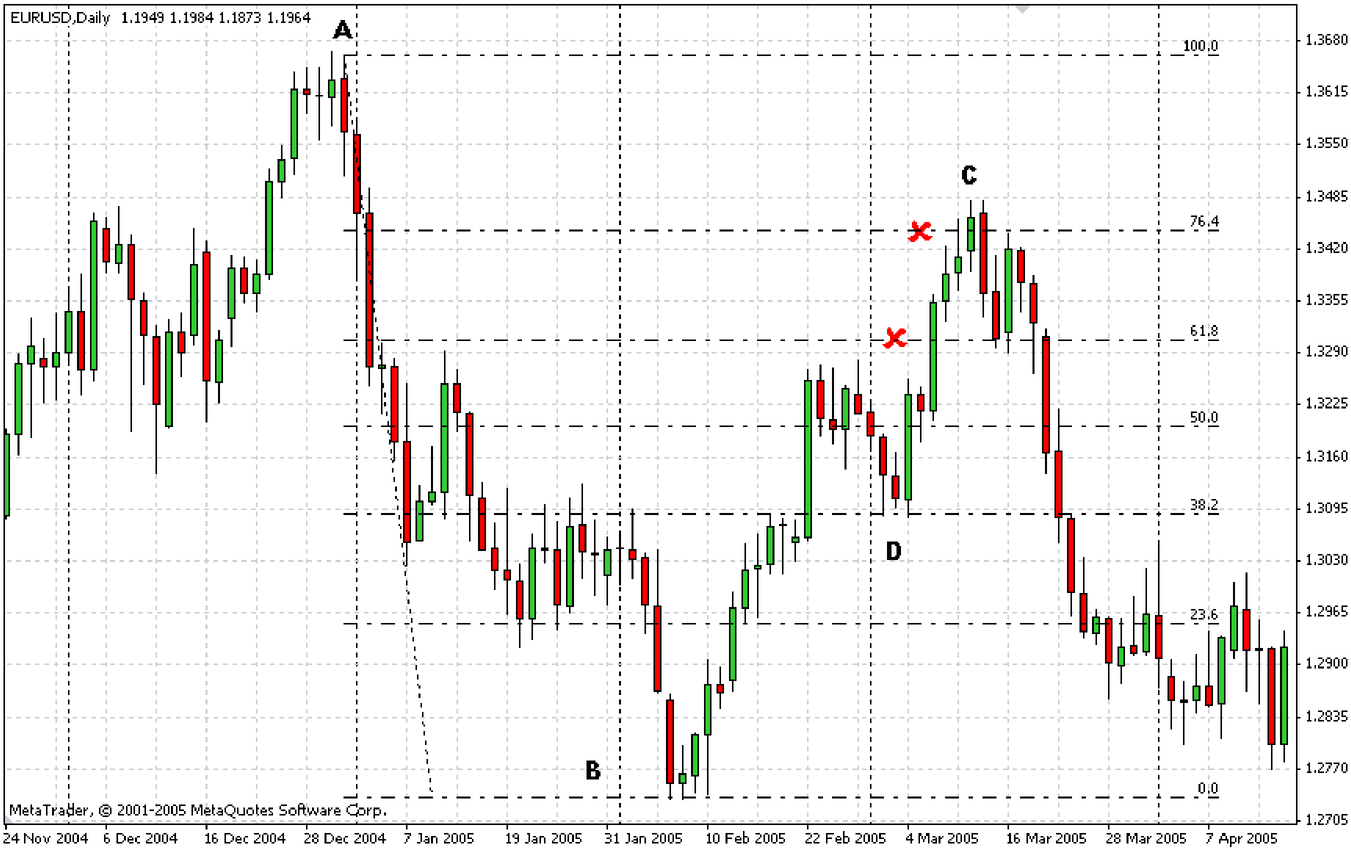


The example above shows two potential targets for the trade entered from point C on the Morning Star Candlestick Pattern, Higher Low Chart Pattern and 76.4% retracement of the move A to B.

There are two target exit points the 161.8% projection at D of the A to B move or the 76.4% retracement of the move A1 to B1. Note that the GBPUSD moved through the 61.8% retracement (A1 to B1) continuing up to D1 the 76.4%. At the 61.8% there was no Candlestick Pattern indicating a reversal so one would stay long. However at point D1 we see a reversal confirmed by a Bear Engulfing Candlestick Pattern.

This example illustrates the importance to put on all possible Fibonacci levels to help find the best exit points.

Example 15
EURUSD Day Chart



The example above shows a good trade on the EURUSD Daily Chart with an entry at **B**, a Morning Star Candlestick Pattern with a retest of the Low.

Exits at 61.8% or 76.4%. Note the reversal is confirmed at point **C** with a Bear Engulfing Candlestick Pattern then a Lower High Chart Pattern.

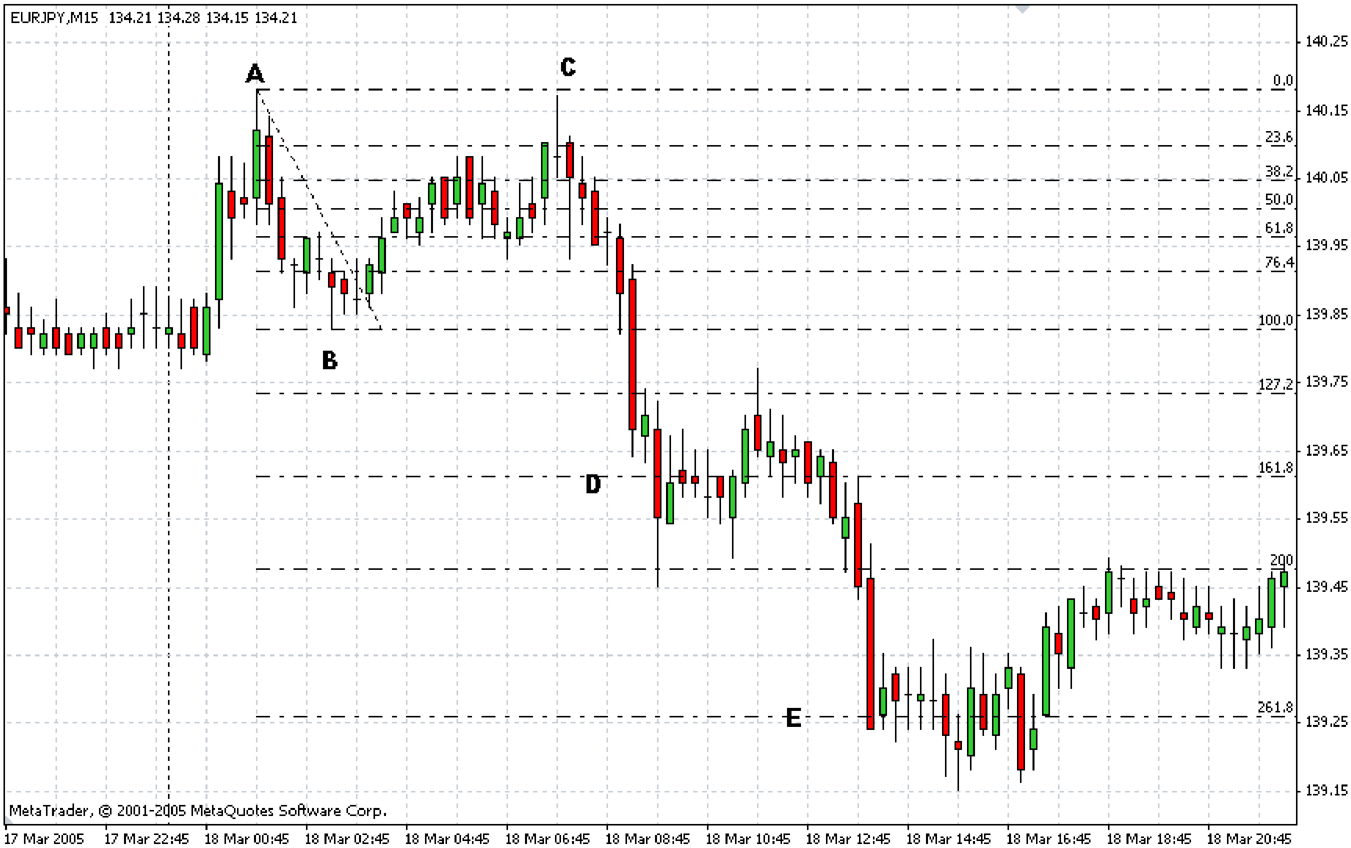
Note the reversal from just below the 61.8% to the support line at **D**. The Morning Star/ Bull Engulfing Candlestick Pattern confirms the continuation of the long trade or provides a new entry point for those who exited the trade on the failure to reach the 61.8% retracement of **A** to **B**.

Example 16
EURJPY Day Chart

There is a short trade entry below C when the EURJPY reversed from the 61.8% retracement of the move A to B, with confirmation signals from the Evening Star and Lower High patterns. The exit is at D when the Morning Star Candlestick Pattern confirmed. Note that the price turned short of the 161.8% target. Thus traders need to be aware that the price does not always reach the Fibonacci Levels.

A long trade entry is at D when the Morning Star Candlestick Pattern confirmed with exit at E at the 61.8% retracement of C to D and the Evening Star Candlestick Pattern.

Example 17
EURJPY 15 min Chart



The chart above shows typical examples of consolidations at D the 161.8% extension of AB and E the 261.8% extension of AB.

The entry short is at C a Double Top and Evening Star Patterns and exits at D or E.

Stop Loss

Forex is a highly volatile market. The exchange rate can move 150 points or more in a matter of minutes, especially if there is major announcement or central bank intervention. For example, when Alan Greenspan made a comment and around the same time the Japanese Government intervened in the market, the affected currencies moved significantly.

One must use a mental stop loss or enter a stop loss or risk losing most or of one's capital. Immediately entering the "market at order", a stop loss must be placed. It is a pre-calculated price where you plan to exit the trade if the market moves against you. It forces you to follow an exit strategy getting you out of the market at around the nominated exit price. If possible, it is wise to place the stop loss just above or below a resistance or support line.

A stop loss should never exceed your maximum exposure amounts. One should never increase your stop loss after you have entered a trade and established your stop price.

RISK TO REWARD RATIOS are important and should be calculated.

A risk reward ratio of 1:1.5 is recommended.
Risk. 30 pips to make a profit of 45 pips or risk 40 pips to make 60 pips.

The best location for placing stops is:

15 pips above the last swing high for a SHORT trade and

10 pips below the last swing low for a LONG trade.

An alternative place for a stop loss would be just past the next Fibonacci level. e .g buy at 61.8% retracement and place the stop loss below 78.6% retracement.

It is still important to apply the above calculations for your risk/reward. If stops exceed the risk/reward calculations, seriously consider not entering the trade.

Moving Stops

It is important to protect your profit. One way is to use a moving stop loss.

When the trade becomes profitable, you move the stop loss to reduce your risk.

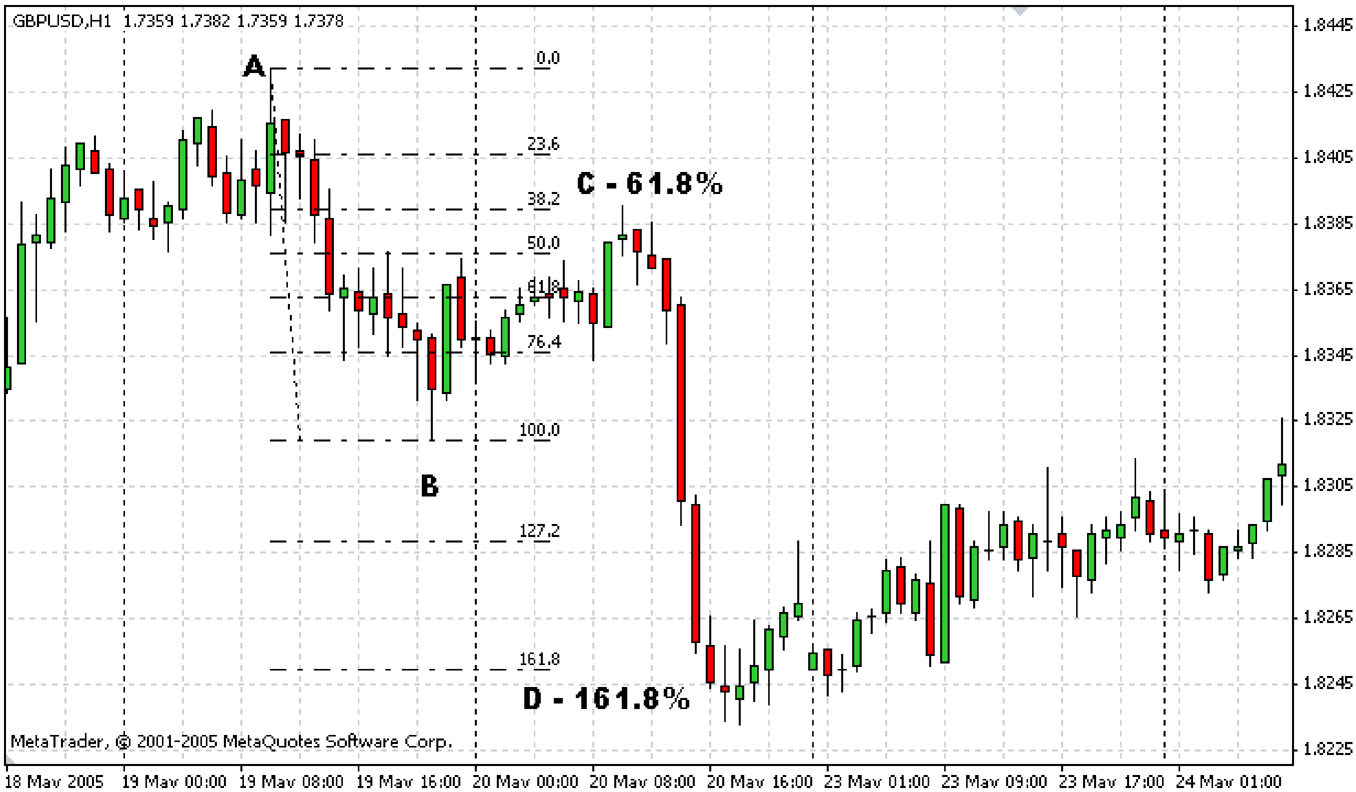
If the Stop Loss is 40 pips with 1:1.5 risk reward ratio, you are risking 40pips to make 60pips profit.

- When the market moves 10 pips in your favour, move the Stop Loss 10 pips. Your Stop Loss will now be reduced to 30 pips.
- Continue reducing the stop loss each time the market moves another 10 pips in your favour. Your stop can eventually be moved to your entry point and give you a “free” trade.
- When the market reaches 75% of your original target for profit, begin progressively tightening the distance of your stop from the current market price.
- If there is no sign of a market reversal, take off your limit order and continue to use the moving stop technique to protect profits and ride the trend.
- If there is strong evidence of a market reversal, close your position with a market order and consider opening a new position going in the new direction. You will need plenty of practice to do this live. We know that after a big rally there is always a consolidation which is basically a retracement to a Fibonacci level.

You need to have a stop that does not follow the market too closely. The noise or whipsaw in the market can be 20 – 30 pips or more and will take out stops that are too small. It is suggested that stops should be at least 30 to 40 points in most cases, especially in the early part of a trade. However, the best position for stops is above and below points of resistance or support as mentioned above.

Additional Chart Examples

Example 18 GBPUSD 1 hour chart.



In the chart above, we are looking for an entry on May 20 so we use the Fibonacci drawing tool to draw a line from the high of the previous day's range (19 May) to the low of that day. Price retraced to 61.8% and reversed downwards.

The Fibonacci Drawing Tool was used on point A (1.8432) and point B (1.8331) to find the profit target at 161.8% extension (1.8250). This was a reasonably accurate target as Price reversed at 1.8232.

Some forex traders use point C to calculate their profit targets. We checked to see how well this worked for this trade.

1st target = C - 0.618(A-B) =1.8390- 0.618 x (1.8432- 1.8331)
=1.8390-62
=1.8328

2nd target =C- 1.0 (A-B) =1.8390-(1.8432-1.8331)
=1.8390-101
=1.8289

3rd target =C-1.618(A-B) =1.8390-1.618 x 101
=1.8390 – 163
=1.8227

From the chart, we can see that priced sliced through the first two targets and reversed 5pips above the 3rd target. The point C method was more accurate than the Fibonacci Drawing Tool in this trade but we have seen hundreds of trades where the Drawing Tool was spot on or only out by 5 pips.

For those who want to investigate the point C method, the calculations for a buy (long trade) are the opposite of those shown above.

i.e.

1st target =0.618(B-A) +C
2nd target= 1.0(B-A) +C
3rd target =1.618(B-A) +C

Conclusion

The methodology works well on all the different time frames and can be used for day trading, swing trading and position trading.

The reason why the Fibonacci ratios are very successful is because they provide a good entry point and a good exit target. A turning point could be a 38.2% retracement on the 4 hour chart and a 61.8% retracement on a 15 min chart.

Disclaimer

None of the techniques discussed in this book should be used without extensive study, back testing and paper trading. The authors make no warranty or guarantee to the content or accuracy of the information.

Forex trading has large potential rewards, but also large potential risk. You must be aware of the risks and be willing to accept them in order to invest in the forex market.

Don't trade with money you can't afford to lose. This is neither a solicitation nor an offer to buy/sell forex. No representation is being made that any account will or is likely to achieve profits or losses similar to those discussed in this book. The past performance of any trading methodology is not necessarily indicative of future results.

The methods we have included in this book work for us but purchasers of this e-book use the information in it entirely at their own risk. The owners of Forex Systems Research Company do not accept any liability in respect of any loss or damage arising from any use of the information contained in this e-book.