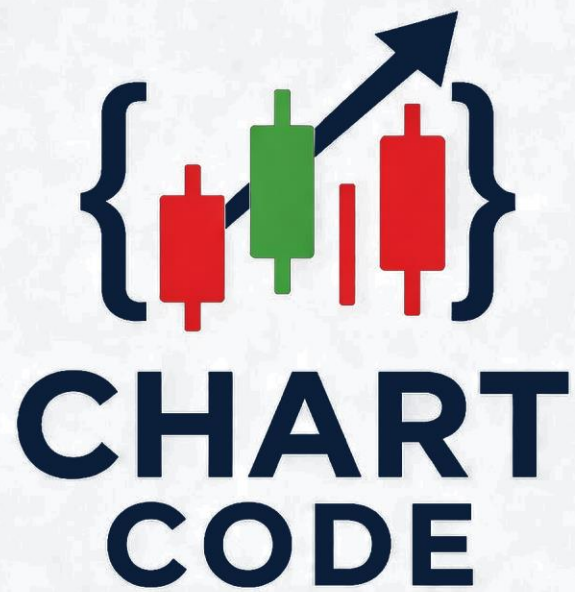




DECODE THE MARKET CODE



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Fibonacci Retracement & Extension

The same Fibonacci ratios that appeared in Elliott Wave and Harmonic Patterns deserve a chapter of their own. Here's exactly what they are, how to draw them, and how to use them for real entries and targets.

1. Introduction — What Is Fibonacci in Trading?

You've already seen Fibonacci ratios appear twice in this course — in Elliott Wave's typical wave relationships, and in the precise measurements that define Harmonic Patterns. That's not a coincidence: certain Fibonacci ratios show up so consistently across price charts, in every market and every timeframe, that they have become one of the most widely used tools in all of technical analysis.

This chapter gives Fibonacci a proper, standalone treatment — where the ratios come from, how to draw retracement and extension levels yourself, and exactly how traders use them to plan real entries, stop-losses, and targets.

KEY

Fibonacci levels work not because of some mystical mathematical property of markets, but because so many traders and institutions watch the same levels and place orders around them — which becomes a self-reinforcing pattern of behaviour, similar to why round numbers and widely followed moving averages act as support and resistance.

2. The Fibonacci Sequence and the Golden Ratio

The Fibonacci sequence is a series of numbers where each number is the sum of the two before it: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, and so on. It was described by the Italian mathematician Leonardo Fibonacci in the 13th century, though the pattern itself had been known earlier in Indian mathematics.

What matters for trading is not the sequence itself, but the ratios between its numbers. As the sequence progresses, dividing any number by the one before it approaches approximately 1.618 — known as the Golden Ratio (denoted by the Greek letter phi). Dividing a number by the one two places ahead approaches approximately 0.618, and by the one three places ahead approaches approximately 0.382. These three figures — 0.382, 0.618, and 1.618 — along with a few related figures, form the basis of every Fibonacci tool used in trading.

3. Fibonacci Retracement

A Fibonacci retracement measures how far price is likely to pull back against a prior move, before potentially resuming in the original direction. It is drawn by connecting a significant swing low to a significant swing high (or vice versa for a downtrend), which then automatically plots several horizontal levels in between.

Fibonacci Retracement — Swing Low to Swing High

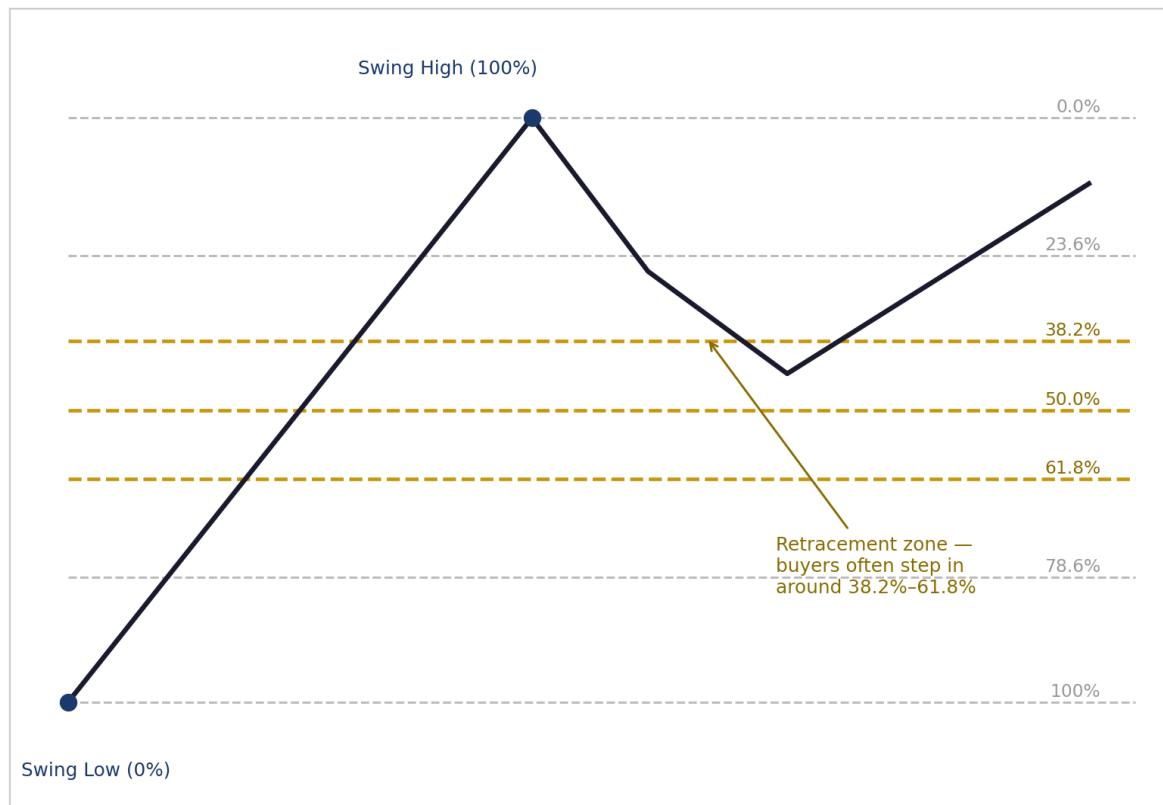


Fig 3.1 — A Fibonacci retracement drawn from a swing low to a swing high, with key levels marked.

3.1 Key Retracement Levels

Level	Significance
23.6%	A shallow retracement, often seen in very strong, fast-moving trends
38.2%	A moderate retracement level, commonly watched in healthy trends
50.0%	Not technically a Fibonacci ratio, but included because markets frequently retrace almost exactly half of a move
61.8%	The 'Golden Ratio' retracement — widely considered the most significant level, often the deepest pullback before a trend resumes
78.6%	A deep retracement; a pullback beyond this level often suggests the original trend may be failing rather than just pausing

3.2 How to Draw a Retracement

For an uptrend, click and drag from the swing low to the swing high — the tool will then plot the retracement levels below the high, showing where a pullback might find support. For a downtrend, draw from the swing high to the swing low instead, plotting levels above the low where a bounce might find resistance.

TIP

Choosing the correct swing points to anchor your retracement is the most important — and most subjective — part of using this tool well. Always use the most obvious, significant recent swing high and low, not a minor, barely noticeable wiggle.

4. Fibonacci Extension

While retracement measures a pullback within an existing move, extension projects a target beyond the original move — used to estimate how far a trend might travel once it resumes after a pullback.

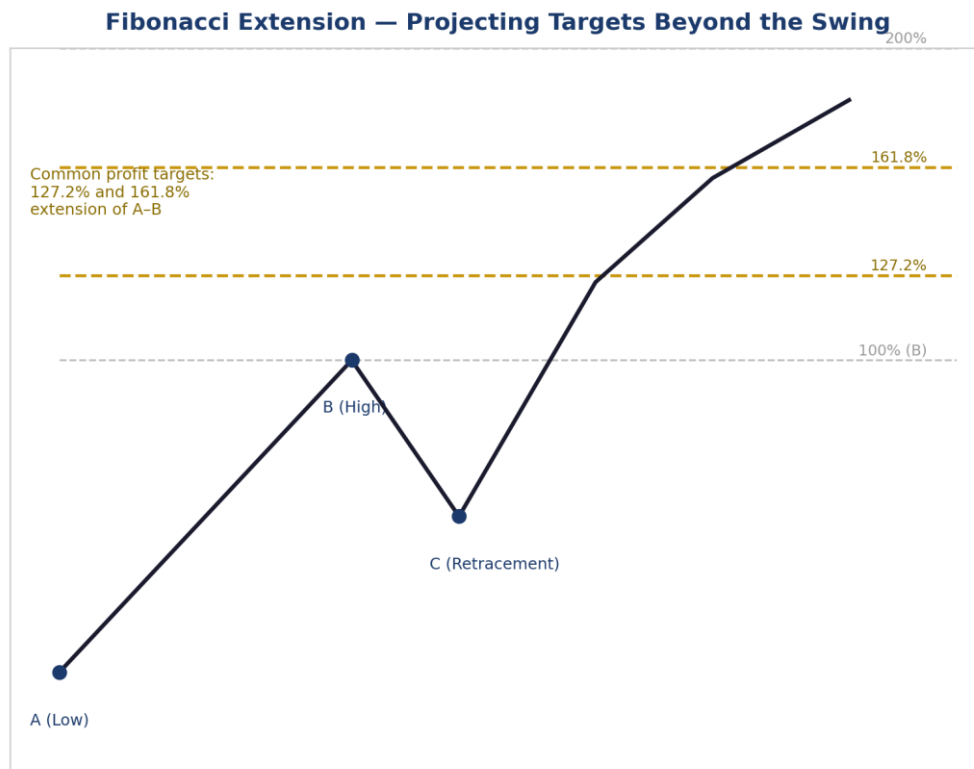


Fig 4.1 — A Fibonacci extension: after a pullback (A to B to C), key levels project potential targets beyond point B.

4.1 Key Extension Levels

- 127.2%: A conservative first extension target, often used for an initial partial profit-booking level.
- 161.8%: The Golden Ratio extension — the most commonly used target level in trading, similar in importance to the 61.8% retracement.
- 200%: A round, secondary target beyond the 161.8% level, used when a trend shows exceptional strength.
- 261.8%: An aggressive, longer-term target for exceptionally strong trending moves.

4.2 Using Extensions for Targets

An extension is drawn using three points: the start of the original move (A), the end of the original move (B), and the end of the pullback (C). The tool then projects the extension levels from point C, giving you a data-driven way to set a realistic profit target once you've entered a trade at or near the retracement zone.

□ Concrete Example

Suppose HDFC Bank rallies from ₹1,500 (A) to ₹1,650 (B), then pulls back to ₹1,590 (C) — a 40% retracement of the rally. Using the Fibonacci extension tool from A to B to C, the 161.8% extension level projects a target around ₹1,747, giving a trader who bought the pullback near ₹1,590 a specific, data-driven level to plan a take-profit.

5. Fibonacci Confluence

Confluence occurs when a Fibonacci level lines up closely with another independent form of support or resistance — a prior swing high/low, a round number, a trendline, or a widely watched moving average. When multiple tools point to the same narrow price zone, that zone becomes considerably more significant than any single tool would suggest on its own.

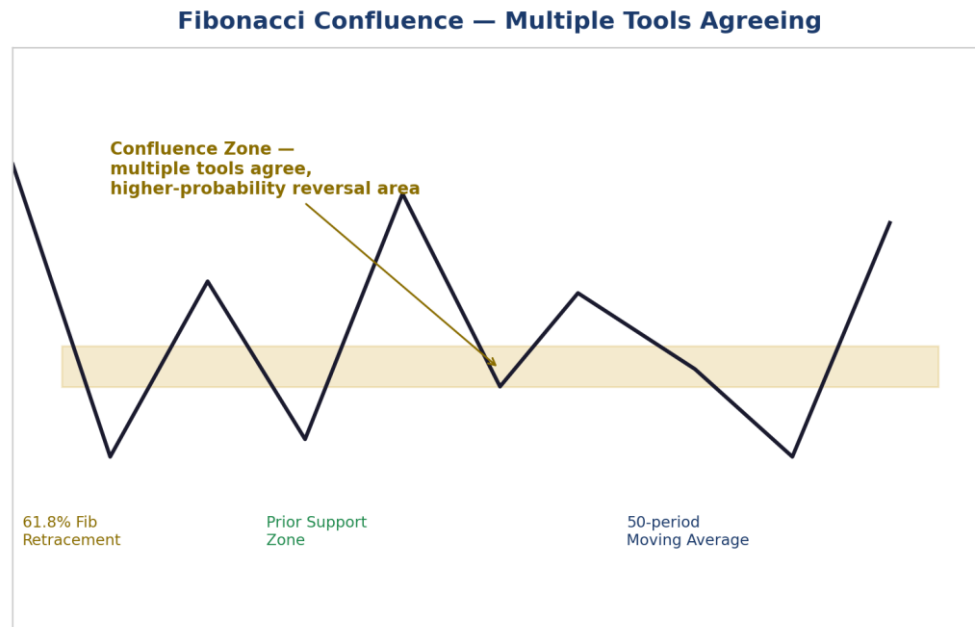


Fig 5.1 — Confluence: a Fibonacci level, prior support, and a moving average all clustering in the same zone.

KEY

Confluence is one of the most reliable ways to filter out weak, low-quality Fibonacci levels from genuinely strong ones. A 61.8% retracement that also happens to land exactly on an old support zone and a 50-day moving average is a far stronger level than a 61.8% retracement sitting in the middle of empty space.

6. How to Trade Using Fibonacci

1. Identify a clear, significant swing high and swing low to anchor your retracement tool.
2. Watch the 38.2%, 50%, and 61.8% zone closely for signs of the pullback stalling — ideally confirmed by a candlestick reversal signal, as covered in our candlestick chapter.
3. Look for confluence — does the Fibonacci level also line up with a prior support/resistance zone, a trendline, or a key moving average?
4. Enter after confirmation, with a stop-loss placed just beyond the next Fibonacci level down (or up), rather than directly at the level itself.
5. Use the Fibonacci extension tool to set a data-driven profit target, commonly at the 127.2% or 161.8% level.

7. Common Mistakes

- Using the wrong swing points: Anchoring the retracement tool on a minor, insignificant wiggle rather than the most obvious recent swing high and low.

- Treating every level as guaranteed support/resistance: Assuming price must reverse exactly at 61.8% every single time, without waiting for actual price confirmation.
- Ignoring confluence: Trading a Fibonacci level in isolation, without checking whether it aligns with any other independent technical level.
- Redrawing constantly: Repeatedly erasing and redrawing the retracement tool on slightly different swing points until it happens to agree with a desired outcome.
- Forgetting the broader trend: Trading a Fibonacci retracement level as if it were a strong reversal signal, even when it sits against a powerful, dominant larger trend.

8. Quick Reference — Fibonacci Cheat Sheet

Tool	Purpose	Most Watched Levels
Retracement	Estimate how far a pullback might go before the trend resumes	38.2%, 50%, 61.8%
Extension	Project a target beyond the original move, after a pullback	127.2%, 161.8%
Confluence	Combine Fibonacci with other tools for higher-confidence zones	Any level + prior S/R, trendline, or moving average

9. Chapter Summary

Here is everything you learned in this chapter in one concise recap:

- Fibonacci ratios — 0.382, 0.618, and 1.618 chief among them — come from the Fibonacci number sequence and appear repeatedly across price charts.
- Fibonacci retracement estimates how far a pullback might go, with 38.2%, 50%, and 61.8% the most closely watched levels.
- Fibonacci extension projects a target beyond the original move, with 127.2% and 161.8% the most commonly used levels.
- Confluence — a Fibonacci level aligning with another independent support/resistance tool — significantly strengthens the reliability of that zone.
- Trading Fibonacci well requires correctly identifying swing points, waiting for price confirmation, and combining it with confluence rather than using it in isolation.