

# FIBONACCI MASTERCLASS

Retracements, Extensions, Symmetry & Clusters

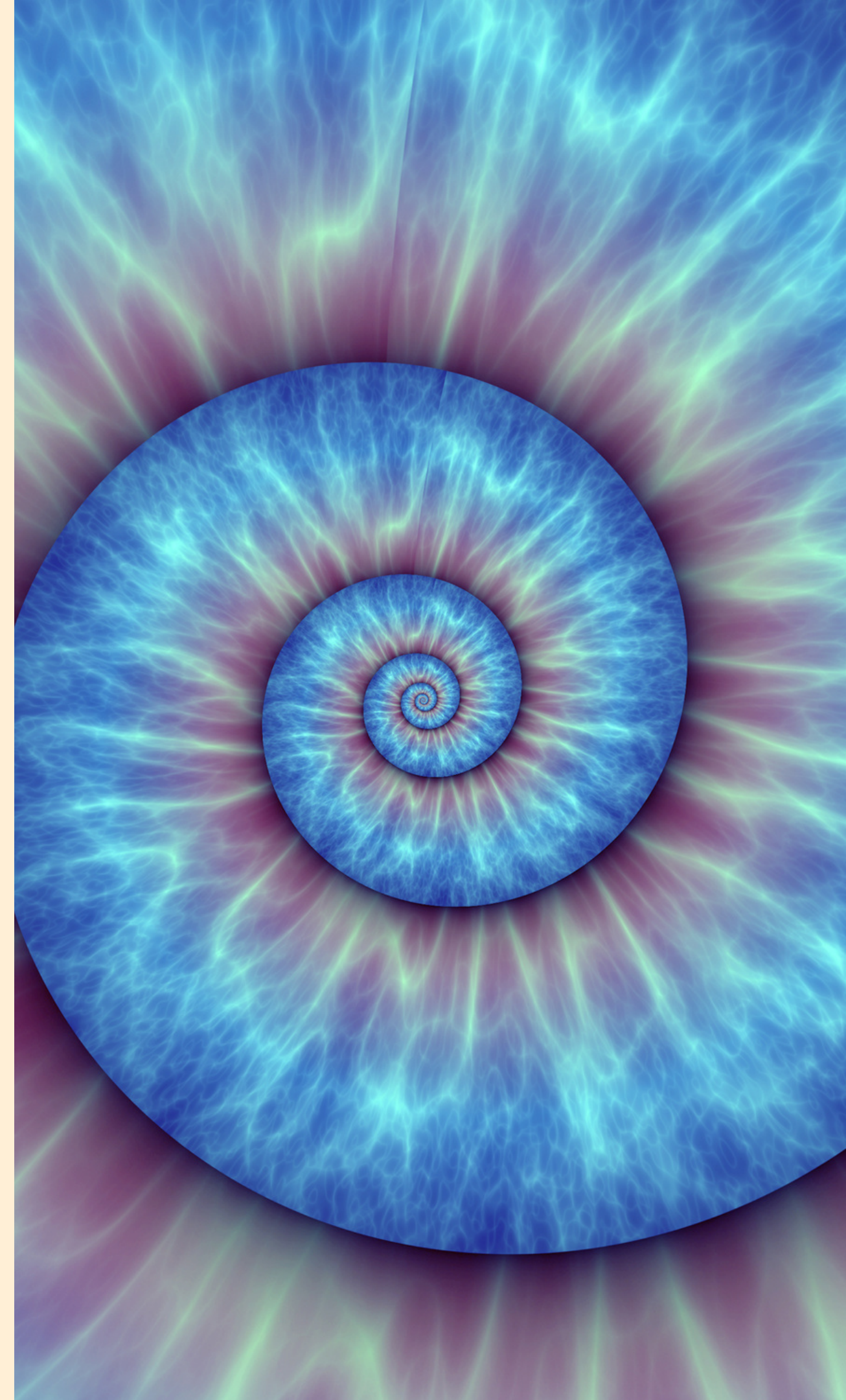
# THE GOLDEN RATIO

The Fibonacci number series was made famous by the Italian mathematician Leonardo de Pisa. The series starts with 0 and 1 and goes out to infinity, with the next numbers being derived by adding the prior two.

0,1,1,2,3,5,8,13,21,34,55,89,144,233,377 to infinity

You'll notice some of those numbers show up in moving averages I use, not a coincidence.

What is most interesting about the series of numbers is the constant within the series. In the relationship, you will find the constant of 1.618, otherwise, known as the golden ratio. The inverse of 1.618 is .618. These two numbers will show up constantly in this master class.





# FIBONACCI RATIOS

Fibonacci ratios are produced by mathematical relationships found in this formula mentioned in the previous slide.

As a result, they produce the following ratios 23.6%, 38.2%, 50%, 61.8%, 78.6%, 100%, 161.8%, 261.8%, and 423.6%. Although 50% is not a pure Fibonacci ratio, it is still used as a support and resistance indicator.





# FIB RETRACEMENTS

Fibonacci retracements are used from a prior swing high to swing low using the ratios of .382%, .5%, .618% and .786%. If the swing length is long, we can also use .236%. These levels will give us an idea of where potential support may be as the market pulls back.

We can also use these very same levels running from a swing high to swing low, to look for levels of resistance as the market bounces from a low.

We will look at both scenarios in a bit and I will take you through some examples.





# FIB EXTENSIONS

Fibonacci price extensions are similar to price retracements in that they run from a prior swing high to low. The difference here is we are running the relationship of the prior swing to extend beyond 100% of the move.

Extensions use the ratios of 1.272 and 1.618 for potential support or resistance, depending on which direction you choose to run them. Additional extensions are 2.618 & 4.236.

Depending on which charting software you use, you have 1 tool or 2 different tools to achieve this. For the purposes of this class, I will be using TrendSpider. I have customized my tools to my liking, if you'd like my settings, feel free to reach out to me and I will happily pass them along.



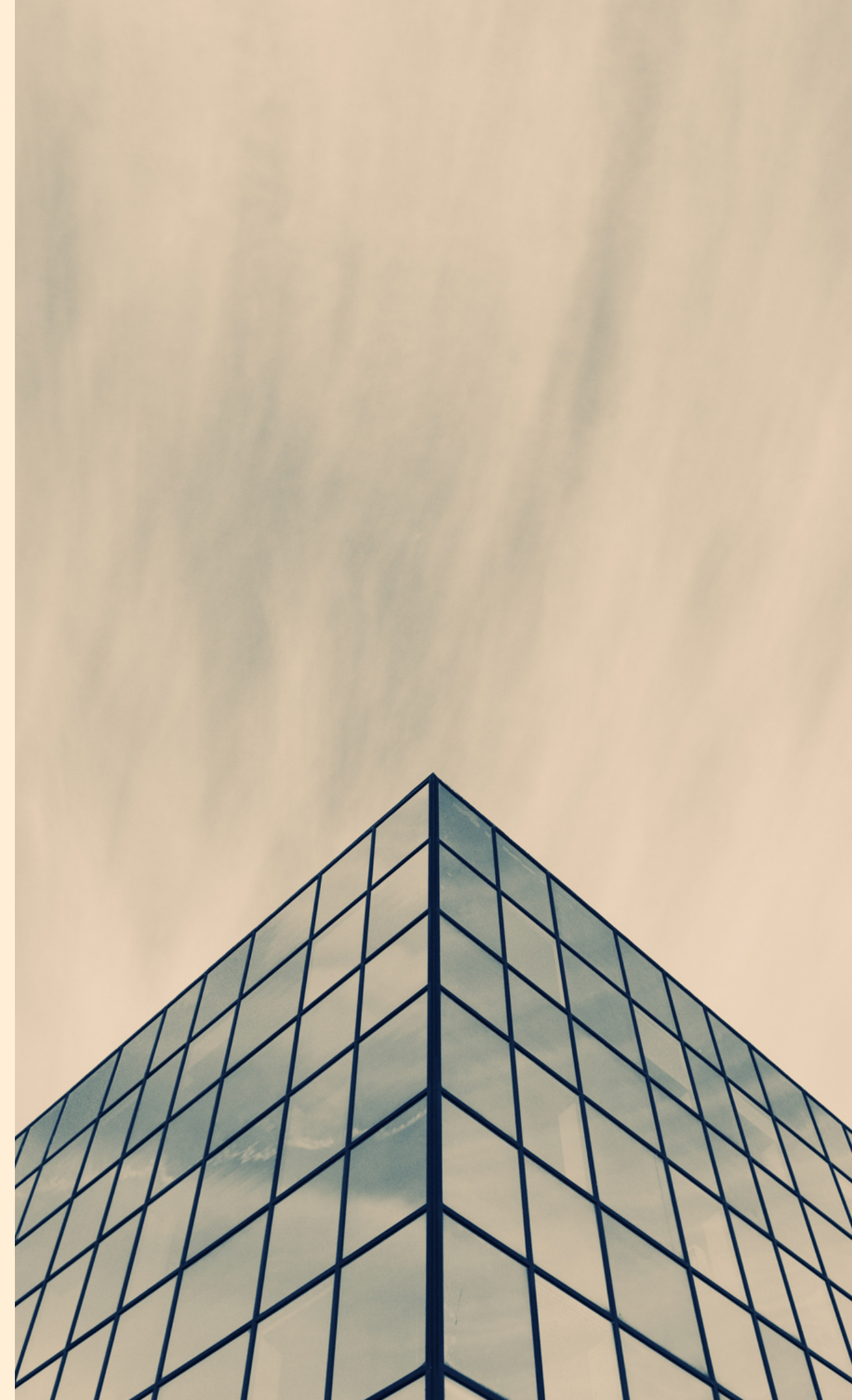


# SYMMETRY

The idea of symmetry is that the market can have moves that are the same length in the same direction. This can be used both in uptrends and downtrends.

I use symmetry most often to project possible support or resistance. This will aid me in entering a trade in the direction of the trend. On the flip side, symmetry can also be projected in the direction of the larger trend to help determine areas where a move might terminate.

This is a simple, yet powerful tool that I don't see many traders using. To use it, you must have a 3 point projection tool. Again, I will be using TrendSpider but your software should have the same equivalent.





# FIB CLUSTERS

These would be instances where at least 3 Fibonacci price relationships come together in a relatively tight range. When clustered, they can help identify key support & resistance levels that can help us better define our trades. You may see more, and more will likely mean the price zone is more important.

Clusters can be formed using retracements, extensions, symmetry, or a combination of the three.

We can use the clusters to determine when we're over key levels in an uptrend and also to determine where price may reverse for a reversal entry on a downtrend.

