Market order : buy or sell at best available price

Limit order : order placed to either buy below the market or sell above the market

- Buy limit order : a price below current market price that will be executed at a price equal to or less than specified price
- sell limit order : a price above current market price that will be executed at a price equal to or more than specified price

Stop order : buy above the market or sell below the market

Long position : sell stop order
short position : buy stop order

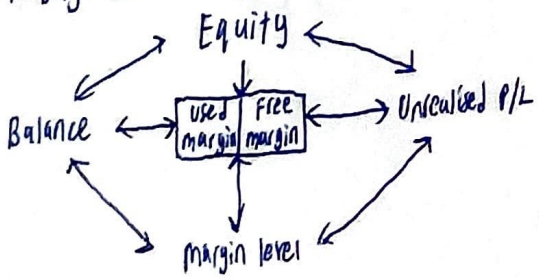
Trailing stop : type of stop loss order attached to a trade that moves as the price fluctuates.

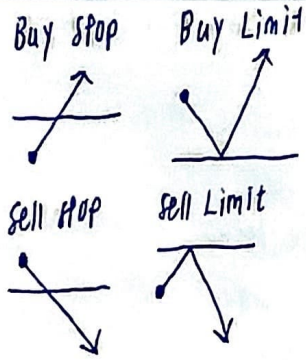
Forex 3-session system. (May take account daylight savings)

1. Asian / Tokyo
2. European / London
3. North American / New York
4. Sydney session

* times may change

Margin trading : enter into positions larger than your account balance





Unrealised P/L (Floating P/L): profit or loss held in current open positions
Realised P/L : profit or loss from a completed trade

Margin: deposit or collateral needed to open a position and keep it open

Required Margin: margin expressed as specific amount of account's currency.

Eg buy or sell 100,000 EUR/USD with no leverage requires $100,000 funds.

BUT,
Margin requirement 2%, only $2,000

Used margin: amount of money needed to deposit to keep all trades open

Required margin = Notional value x Margin requirement

Equity : sum of account balance and all floating profits or losses. / represents current value of account

Free margin / usable margin : difference between Equity and Used margin
(money that is not 'locked up')

Margin level: percentage value based on amount of equity versus used margin.

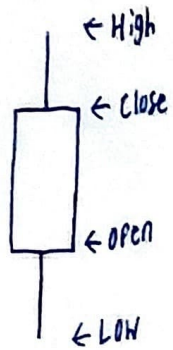
- Margin level = (Equity / used margin) x 100%

↑Margin level, ↑Free margin available to trade

Margin call : Margin level fallen below required minimum level
- positions may be liquidated

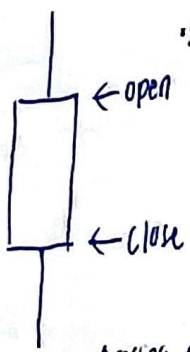
Stop out level : Margin level falls to specific percentage level and open positions are closed

Green Candle



- Longer = ↑buying pressure

Red Candle

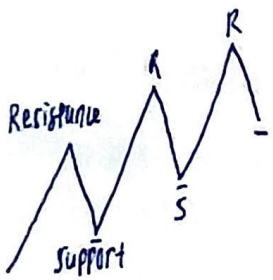


- Longer = ↑selling pressure

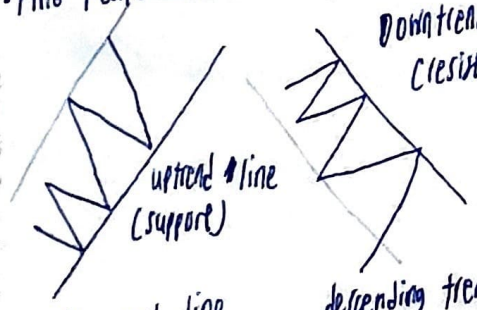
- Long body = ↑buying or ↑selling pressure
- Short bodies = ↓buying or ↓selling activities

Resistance: Surplus of sellers

Support: surplus of buyers



- More often price tests a level of R or S without breaking it, stronger area of R or S.
- Find peaks and zones (valleys included)



ascending trend line

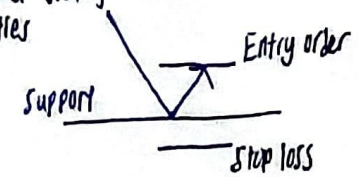
descending trend line

Trend Channels

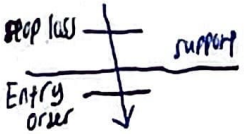
- Price hit lower trend line, buying area
- Vice versa
- Must be parallel

- At least two tops or bottoms to draw a valid trend line but THREE to confirm a trend line
- Steeper the trend line, less reliable and more likely to break.

The Bounce



The Break



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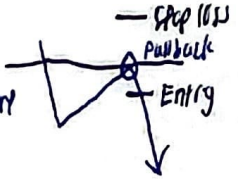


Psychological levels

1. Round numbers
   - price levels end in zero or five, eg 100 or 1.50
2. previous highs or lows
3. Moving averages

Spinning tops

Shows indecision between buyers and sellers

- possible reversal

Marubozu candlestick

- end of uptrend, continuation
- end of downtrend, reversal
- For black, vice versa

Doji candlesticks

- Same open and close price / bodies extremely short
- Suggest indecision or struggle for turf positioning

Long-legged | Dragonfly | Gravestone | Four price

- After series of candlesticks with long bodies, signal buyers/sellers are becoming exhausted and weakening

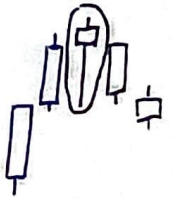
Hammer & Hanging Man

Hammer

- Bullish reversal pattern that forms during downtrend.
- Long lower shadow = sellers pushed prices lower, but buyers overcame selling pressure
- Confirmation: wait green candlestick to close above

Recognition criteria:

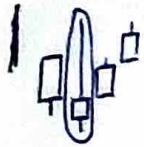
1. Long shadow 2x / 3x of real body
2. Little or no upper shadow



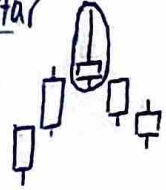
Hanging man

- Bearish reversal pattern that can also mark a top or strong resistance level

Inverted Hammer & Shooting Star

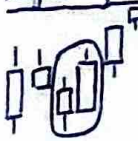


Inverted Hammer
- Bullish reversal candlestick



Shooting star
- Bearish reversal candlestick
- Buyers attempted push price up, sellers came in and overpowered them
- Definite sign

Engulfing Candles

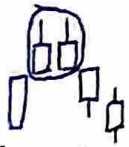


Bullish Engulfing
- Two candlestick reversal
- Second candle 'engulfs' the bearish candle

Bearish engulfing
- opposite

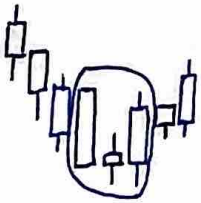
Tweezer Bottoms & Tops

Tweezer Bottoms
- First candlestick is same as overall trend. If price is moving up, then first candle should be bullish.
- Second candlestick is opposite the overall trend. If price is moving up, then second candle should be bearish.
- Usually spotted after an extended uptrend or downtrend.



Tweezer tops

Evening and Morning Stars



Morning star

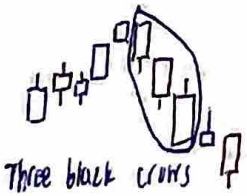
Evening star

Eg evening star,

1. First candlestick is a bullish candle, which is part of recent uptrend
2. Second candle has a small body, indicating that there could be some indecision in market. Either bullish or bearish.
3. Third candlestick acts as a confirmation that a reversal is in place, as candle closes beyond midpoint of first candle

Three White soldiers & Black Crows

Three White soldiers

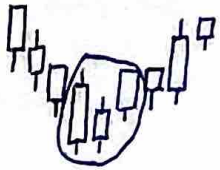


Three black crows

Eg Three black crows,

1. Formed when three bearish candles follow a strong uptrend, indicating a reversal
2. Second candle's body should be bigger than first candle and should close at or very near its low.
3. Third candle should be the same size or larger than the second candle's body with a very short or no lower shadow.

Three inside up & down



Three inside up

Three inside down

Eg Three inside up,

It is a trend reversal pattern found at bottom of downtrend.

1. First candle should be found at the bottom of a downtrend and is characterized by a long bearish candlestick.
2. Second candle should at least make it up all the way up to the midpoint of first candle.
3. Third candlestick needs to close above first candle's high to confirm that buyers have overpowered strength of downtrend.

Fibonacci Retracement levels
- 0.236, 0.382, 0.618, 0.764, 50.0%

Fibonacci Extension levels
- 0, 0.382, 0.618, 1.000, 1.382, 1.618

Swing High: Candlestick with at least two lower highs on both left and right of itself.

Swing Low: Candlestick with at least two higher lows on both the left and right of itself.

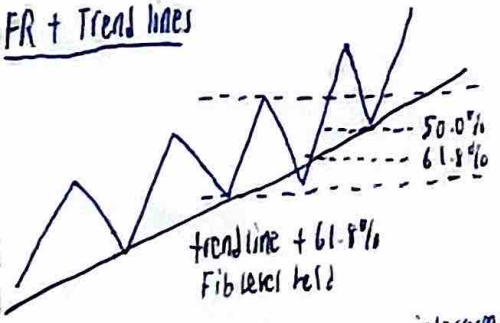
Fibonacci retracement levels are horizontally lines that indicate the possible support and resistance levels where price could potentially reverse direction.

- After a price begins a new trend direction, price will retrace or return partway back to a previous price level before resuming in the direction of its trend
- Ensure price do not close below the lines

FR + S&R

- S&R level MUST line up with FR levels
- Price must not close below it.

FR + Trend lines



- 50.0% and 61.8% Fib levels are intersected by rising trend line
- price will bounce on trend line

Fib Sticks

- Look for exhaustive candlesticks

Eg long-legged doji formed on 61.8%, this indicates a reversal.

- wait for a stick to form right below or above a FR level, then enter a trade at market price since there is confirmation

* Fibonacci extension levels: price finds at least some temporary support or resistance, so take profits there.

Using Fibonacci to place stops

1. Place stop just above past next Fib
   - plan on enter at 38.2% fib level, place stop at 50.0% level
   - If 50.0% would hold, then stop at 61.8%

* short-term, intraday trades because dependent on perfect entry

2. Place stop past recent swing high/low
   - price uptrend, long position, place stop loss just below latest swing low which acts as potential support level
   - price downtrend, short position, stop loss just above the swing high which acts as potential resistance lvl.
   - If market price surpass swing high or swing low, indicate a reversal of trend.

Moving averages

- Smooth out price action
  - Smoother it is, slower it is to react to price movement
  - Choppier the moving average, quicker it is to react to price movement
  - Shorter its 'length', fewer data points, closer MA stays to current price → not useful.

1. Simple moving Average (SMA)
   - Calculated by adding up the last 'x' period's closing prices and then dividing that number by x

Eg plotted a 5 period SMA on a 1-hour chart, add up closing prices for last 5 hours, divide that number by 5.

- Longer periods = slower reaction to price movement.

* very susceptible to spikes

- Displays a smooth chart that eliminates most fakeouts but, slow-moving which may cause a lag in signals.

2. Exponential Moving Average (EMA)

- put more weight on prices of the most recent days.
- more accurately represent price action, quick moving

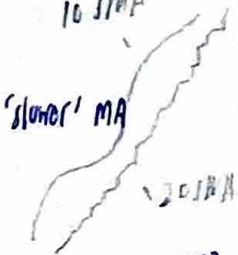
but, more prone to fakeouts and give errant signals.

Finding trend using MA (SMA)

- Price action stay above MA, signal price is general uptrend
- vice versa

* Plot a couple of MA instead of just ONE

- In uptrend, 'faster' MA should be above the 'slower' MA
- downtrend, slower MA over faster MA



Moving Average Crossovers

- Occurs when two different moving averages lines cross over one another.
- Determine when a trend is about to end and reverse

Helps to answer:

1. Which direction might price be trending
2. potential entry points for a trend trade
3. When might a trade be ending or reversing

- Offers specific triggers for potential entry and exit points.

MA as dynamic support and resistance levels

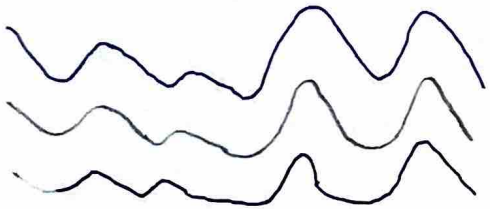
- Price will approach MA and test it, it will act as Resistance or Support
- If close above MA, use two MA, the space between the two MA is where to look to buy or sell.
- can break through and retrace back to act as support or resistance

Moving Average Envelopes

- Consist of a MA and two other lines
- Used to confirm trend and identify overbought and oversold conditions

1. Use SMA or EMA
2. Select number of time periods
3. Set percentage value

Eg 10 day MA with 1% envelope,
Upper = 10-day SMA + (10 day SMA x 0.1%)
Lower = 10-day SMA - (10-day SMA x 0.1)



- Envelopes moving higher, uptrend, vice versa
- If price closes above upper envelope, buy, vice versa
- When MA is flat, price will initially move above or below the envelope but turn back around.
- When price moves above upper envelope, overbought, vice versa

Moving Average Ribbons

- Series of moving averages of different lengths, usually between 6 to 16 moving averages.

Eg 6 to 8 SMA set at 10-period intervals, such as 10, 20, 30, 40, 50 and 60

Responsiveness can be adjusted by:
- Changing the number of time periods used
- Changing type of MA from a SMA to an EMA
- Shorter number of periods = more sensitive

1. Expanding moving average ribbon signals potential end of a trend.
2. Contracting MA ribbon signals possible change in trend.
3. Parallel MA ribbon signals strong trend

* Positioning of short-term MA relative to long-term MA shows direction of trend
* spacing between MA shows strength of trend.

Guppy Multiple Moving Average (GMMA)

- objective method of when to get in and when to get out
- Composed of 12 EMAs which are separated into two groups:

1. Short-term group of EMA
   - signals are given
   - Periods: 3, 5, 8, 10, 12, 15
   - When crosses above long-term group, BUY
2. Long-term group of EMA
   - Trend is determined
   - Periods: 30, 35, 40, 45, 50, 60
   - When crosses ~~below short~~ above short-term group, sell

How to Use: (when all cross, not one)
- Degree of separation between short and long can be used as indicator of trend strength.
  - Wide separation = prevailing trend is strong
  - Narrow separation: weakening trend or period of consolidation
- Crossovers represent trend reversals.
  - Short cross above long, bullish crossover and bullish reversal
  - Short cross below long, bearish crossover and bearish reversal
- There is lack of trend if, both groups moving horizontally, or mostly moving sideways and heavily intertwined.

Bollinger Bands

- Measure market's volatility and identify overbought or oversold conditions
- When market is quiet, bands contract and when market is loud, the bands expand.
- Price tends to return to the middle of the bands
- Bands act as dynamic support and resistance levels
- Longer time frame = stronger bands

* best used when market is ranging and there is no clear trend.

- During a bollinger squeeze if candles start to break out above the TOP band, more will usually continue to go up.

Keltner Channels

- Channel top typically holds as dynamic resistance while channel bottom serves as a dynamic support.
- Commonly used settings are 2x ATR (1x) for upper and lower lines and EMA (20), which is the middle line (can as pullback level)

Eg In uptrend, price action tends to be confined in the upper half of the channel
In downtrend, price confined around bottom half
In ranging market, price swings back and forth

- If candles start break out TOP, more will usually continue up.

Moving Average Convergence Divergence (MACD)

- First number of periods calculate faster-moving average
- Second number of periods used in slower moving average
- Third is number of bars used to calculate moving average of difference between faster and slower moving averages.

1. MACD line represents difference between two moving averages
2. Signal line represent moving average of MACD line
3. Histogram is graphical representation of distance between MACD line and signal line

- Histogram bigger = ↑ divergence between two lines
- Histogram smaller = moving averages are closer

* When it crosses, A new trend is identified

Parabolic Stop And Reversal (SAR)

- Identify where trend is ending
- best used in markets that are trending, and that have long rallies and downturns
- BUY signal = dots below candles
- SELL signal = dots above candles

Stochastic Indicator

Theory:

1. During uptrend, price will remain equal to or above previous closing price
2. During downtrend, price will remain equal to or below previous closing price

- Above 80 = overbought = buy
- Below 20 = possibly oversold = sell

Relative Strength Index (RSI)

- readings of 30 or lower = oversold market conditions and an increase in possibility of price strengthening
- readings of 70 or higher = overbought conditions and increase in possibility of price weakening.
- Rising centerline crossover: RSI value crosses above 50, moving towards 70, indicates trend increasing in strength, bullish
- Falling centerline crossover: RSI value crosses below 50, moving towards 30, indicates trend weakening, bearish.

*used to confirm trend formations.

Williams Percent Range (%R)

- above -20 = Overbought
- below -80 = oversold

*More sensitive version of Stochastic

Average Directional Index (ADX)

- Measures strength of current trend
- Identify whether market is ranging or starting a new trend.

Rising value = strengthening trend
Falling value = weakening trend
Below 20 = weak trend
Between 20 and 40 = strong trend
Above 40 = Extreme trend

- Confirmation whether it continues in current trend

*does not determine bullish or bearish trend

Ichimoku Kinko Hyo

- Gauges future price momentum and determine future areas of support and resistance.
- can be used in all time frames for any asset
- can be used in both rising and falling markets

*cannot use when no clear trend exists
*trade in direction of trend and not against

1. Senkou Span (orange lines) First
- price above senkou span, top line serves as support level while bottom line serves as second support level
- price below senkou span, bottom line forms first resistance level while top line is second resistance level.

2. Kijun Sen (blue line)
- Standard or base line
- Acts as indicator of future price movement
- price higher than blue line, continue to climb higher
- price below blue line, keep dropping

3. Tenkan Sen (red line) - turning line
- indicator of market trend
- red line moving up or down, indicate market trending
- moves horizontally, signal market ranging

4. Chikou Span (green line) - lagging line
- green line crosses price in bottom-up direction, buy signal
- green line crosses price from top-down, sell signal.

typically oscillators
- Leading indicator: gives signal before the new trend or reversal occurs
- Lagging indicator: gives signal after trend has started

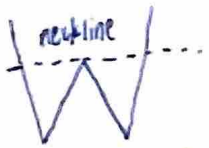
trend-following or trend-confirming indicators

- use lagging during trending markets and leading during sideways market.

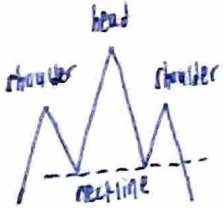
Double top (Reversal)

- Second top do not break the high of first top.

Double bottom

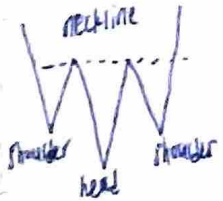


Head and Shoulders (Reversal)



- Peak, higher peak, lower peak
- More reliable if slope of neckline is down
- Distance high point of head to neckline = how far price will move.

Inverse head and Shoulders



Wedge chart patterns (Reversal, Continuation)

- When two trend lines converge, magnitude of price movement within pattern is decreasing.
- Signals a pause in current trend

1. Rising wedge
- Bearish chart pattern found in downward trend, and the lines slope up.
- Slope of support line steeper than resistance.

- price action forming new highs but slower pace than when price makes higher lows
- price movement after breakout same as height of formation

2. Falling wedge
- Bullish chart pattern take place in upward trend, and lines slope down.

- trend line for highs steeper than trend line for lows

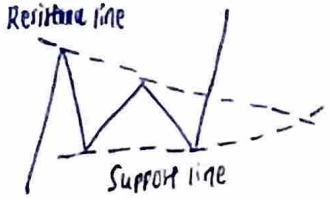
Rectangle chart patterns (continuation)

- Formed when price bounded by parallel support and resistance
- exhibit periods of consolidation or indecision between buyers and sellers.

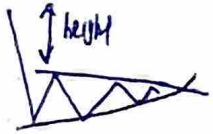
1. Bearish Rectangle
- Formed when price consolidates for a while during downtrend.
- price movement after breakout similar to size of rectangle

2. Bullish rectangle

Pennants (Continuation)



1. Bearish pennants



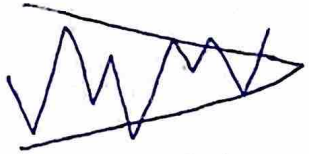
2. Bullish pennants

- height of earlier move = price movement

Triangle chart patterns (Bilateral)

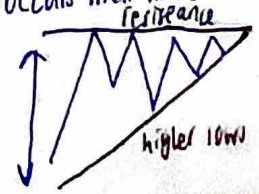
- Continuation pattern = price continues in that trend direction
- includes at least five touches of support and resistance

1. Symmetrical Triangle
- no clear trend



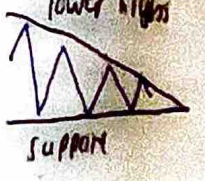
breakout is near but not sure which direction

2. Ascending triangle
- occurs when there is a resistance level and a slope of higher lows



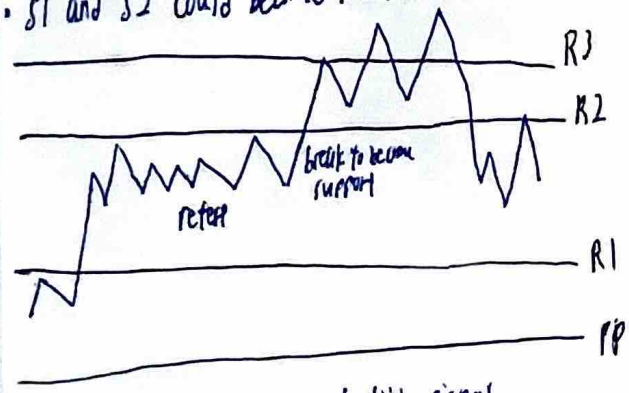
- price can either go up or go down

3. Descending triangle



Pivot Points

- A pivot point and its support/resistance level are areas which the direction of price movement can possibly change.
- Objective
- The more times a currency pair touches a pivot level then reverses, the stronger the level is.
- S1 and S2 could become resistance levels



- typically, when price above PP, bullish signal
- when price staged below PP, bearish signal.
- potential areas where price reversals or continuation

Heikin Ashi

- Determine to stay or get out
- reduces market noise and enable clear analysis of trends
- Candlesticks starts from the middle

Formula:

High = Maximum of High, open, or close (whichever is highest)

Low = minimum of Low, open, or close (whichever is lowest)

Open = [Open(previous bar) + Close(previous bar)] ÷ 2

Close = (Open + High + Low + Close) ÷ 4

- Smaller the wick, stronger the trend
- Used to identify trend direction and strength
- Green candle = up, Red candle = down
- No lower shadow on green, no upper wick on red

1. Green candlesticks signal uptrend
2. Green candlesticks with no lower shadow or wick indicate a strong uptrend.
3. Candlesticks with small bodies showing upper and lower shadows indicate a possible trend reversal or pause.
4. Red candlesticks signal downtrend
5. Red no upper wick indicate strong downtrend

Limitations:

1. Do not show true prices
2. obscure actual price information
3. May not be responsive enough

Elliott Wave Theory

1. Impulse waves

1, 3, 5 are motive
2, 4 are corrective

Wave 1: Previous trend ended and new trend emerged
- caused by small number of people who buy

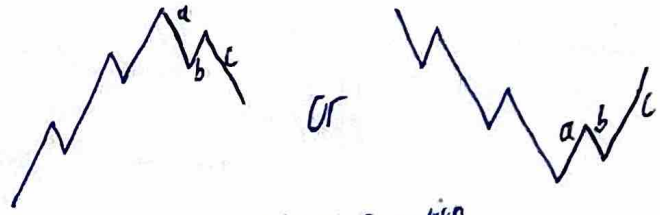
Wave 2: First pullback
- Profits are taken here, can never retrace more than height of of wave 1

Wave 3: Longest and strongest wave
- Mass public will follow trend

Wave 4: Corrective in nature
- profits are taken

Wave 5: last move
- driven by hysteria

2. Corrective waves

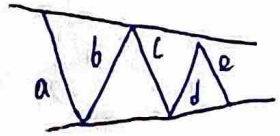


a) Zig-Zag pattern b) Flat formation

- very steep moves

- Generally equal in length

c) Triangle formation



Rules:

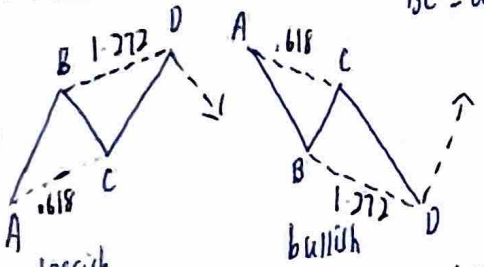
1. Wave 3 can never be the shortest impulse wave
2. Wave 2 can never go beyond start of wave 1
3. Wave 4 can never cross in the same price area as wave 1

Harmonic Price Patterns

- Must meet specific movement requirements
- based on Fibonacci retracements and extensions
- Must wait for entire pattern to complete

AB, CD = legs
BC = correction, retracement

1. ABCD

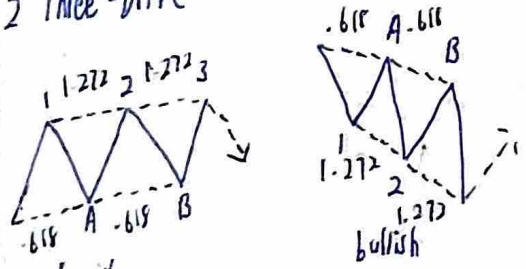


bearish bullish

- If FR used on leg AB, retracement BC should reach 0.618 level. line CD should be 1.272.

Rules:
1. Length of line AB should be equal to length of line CD
2. Time it takes for price to go from A to B should be equal to time it takes for price to move from C to D.

2 Three-Drive



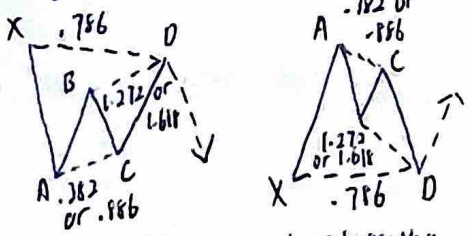
bearish bullish

- Point A 61.8% retracement of drive 1. Point B 0.618 of drive 2.
- drive 2 1.272 extension of correction A and drive 3 be 1.272 extension of correction B.

Rules:
1 Time to complete retracement A and B should be equal
2 Time it takes price to complete drive 2 should be equal to time it takes to complete drive 3.

Gartley 222 pattern

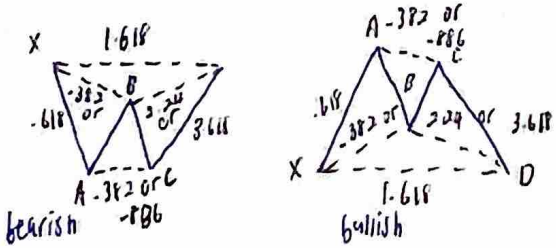
- include basic ABCD pattern but are preceded by a significant high or low.



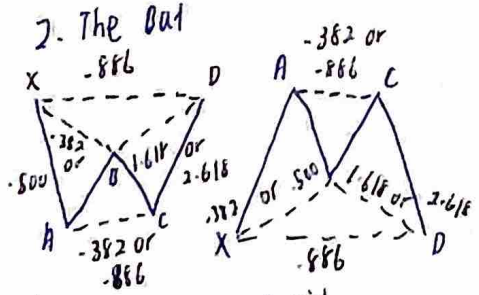
bearish Gartley bullish gartley

Perfect Gartley:
1. Move AB should be .618 retracement of move XA
2. Move BC should be either .382 or .886 retracement of AB
3. If retracement of move BC is .382 of move AB, then CD should be 1.272 of move BC. Consequently, if BC is .886 of AB, CD should extend 1.618 of move BC.
4. CD should be .786 retracement of XA

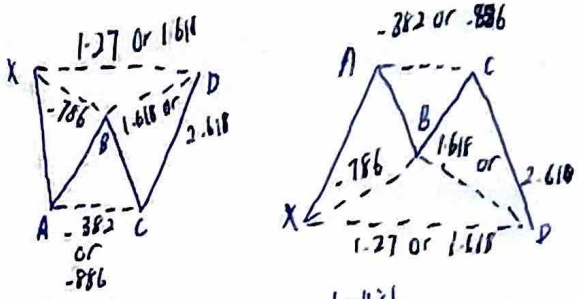
1. The Crab



2. The Bat



3. The Butterfly



Trading divergences

- If price making higher highs, oscillator should also be making higher highs
- If they are not, price and oscillator are diverging.

1. Regular divergences
- signal possible trend reversal

a) Regular Bullish Divergence
- price making lower lows, but oscillator making higher lows.
- normally occurs at end of downtrend

b) Regular Bearish Divergence
- price making higher high, but oscillator lower high
- can be found in uptrend.

2. Hidden divergences
- signal possible trend continuation

a) Hidden Bullish divergence
- price makes higher low, but oscillator makes lower low
- when it is in an uptrend

b) Hidden Bearish divergence
- price makes lower high, but oscillator makes higher high
- occurs in a downtrend.

Guidelines: to avoid entering early
1. Wait for an indicator crossover
2. Wait for indicator to move out of overbought/oversold territory.
- Determine where momentum will shift
3. Draw trend lines on momentum indicator itself
- If price action and indicator break trend lines, signal a shift

Rules:
1. Trade in this price scenario
a) Higher high than the previous high
b) Lower low than the previous low
c) Double top
d) Double bottom
2. Draw lines on successive tops and bottoms
3. Connect tops and bottoms only
4. Focus on tops and bottoms of indicator only
5. Draw and connect the highs and lows on both price action and indicator
6. Maintain vertical alignment with price and indicator
7. Divergence only exists if slope differs
8. Longer time frames are more reliable
- 1-hour charts or longer.

Average True Range (ATR)

- measures volatility of markets

Eg if ATR = 20, show average trading range for past 20 days.
- When ATR falling, volatility is decreasing
- When ATR increasing, volatility is rising.
- confirms trend in a trending market

Trending market

1. Moving averages
- Eg 7 period, 20 period, and 65 period SMA
- If 7 on top of 20, and 20 on top of 65, price trending up
- If 7 below 20, and 20 below 65, price trending down

2. Bollinger bands
- buy zone: Area between top two bands of 1SD and 2SD bands
- sell zone: Area between two bottom bands of 1SD and 2SD
- Struggle to find direction: Area between the SD bands
- Downtrend = when price in sell zone
- up trend = when price in buy zone

Range-bound market

1. ADX
- Market is ranging when ADX below 25

2. Bollinger bands
- When bands are thin and continues, volatility is low and little movement of price in one direction
- When bands start to expand, volatility is increasing and more movement of price in one direction is likely

Measuring volatility

1. Moving average
2. Bollinger bands
3. ATR

Measure strength of breakout

1. MACD
- Histogram bigger, momentum is getting stronger, vice versa
- momentum increases as market makes a trend but, when momentum decreases, trend could be close to an end and trend reversal is likely

2. RSI

Trading Fakeouts → Trading false breakouts

- In fading breakouts, always remember that there should be space between trend line and price
- If price inching towards trend line very slowly, false breakout may be likely
- Fast price movement towards trend line could prove success breakout.

Eg when using trend line, enter when price pops back inside

Two common chart patterns:

- Head and shoulders
- Double top/bottom

Trading with Three time frames:

1. Largest time frame
   - Determine main trend
2. Next time frame down
   - Signals the medium-term buy or selling bias
   - Determine current market bias - bullish or bearish?
3. Smallest time frame
   - Determine entry and exit points