**CHAPTER IX**

Math-Modeled Pre-Trade Simulator (as of November 3rd, 2020)

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| --- | --- | --- | --- |
| 1 | **aTp** | adjusted target price | **1,950** |
| 2 | **eTp** | expect target price | 1,950 |
| 3 | **cP** | current price | **1,877** |
| 4 | **mTp** | max trading price | **1,800** |
| 5 | **rmTp** | real max trading price | **1,850** |
| 6 | **rAEPr** | real average entry price | 1,900 |
| 7 | **pAEPr** | projected average entry price | 1,875 |
| 8 | **pAP** | projected average profit | 50 |
| 9 | **rAP** | real average profit | 50 |
| 10 | **mAP** | max average Profit | 75 |
| 11 | **mL** | minimum Lot Size | 0.01 |
| 12 | **aP** | accumulative positions | 150 |
| 13 | **mPR** | max price range | 150 |
| 14 | **emP** | expected max profit | **11,250** |
| 15 | **eP** | expected profit | **7,500** |
| 16 | **P** | real gross profit | **7,500** |
| 17 | **L** | leverage | 200 |
| 18 | **M** | margin | 1,406 |
| 19 | **S** | forecasted swaps | 1,633 |
| 20 | **A** | minimal Account equity | **15,695** |
| 21 | **C** | cushion | **50** |
| 22 | **LTC** | loss-cutting-threshold | **125** |
| 23 | **cE** | cushion equity | **18,750** |
| 24 | **hA** | healthy account | **34,445** |
| 25 | **aE** | equity after trades operation | 41,945 |

**GLOSSARY**

(Non-alphabetical, but in order of meaning dependency and relevancy)

**TCA**(Trending-Cost-Average) is the philosophy and practice of spreading account capital into many small trades across the pre-defined trading range instead of taking a large trade. This strategy is built on the assumption that a certain trading instrument (like gold or XAUUSD) has a pre-conceived clear trend.

**ATS** is the Automated Trading System. Its synonyms are **ATR** (Automated Trading Robots), or **AITS** (Artificial Intelligence Trading System).

**ILC** (Incremental-Loss-Cutting) is the practice of eliminating losing positions incrementally when the market moves again your open positions even passing the Loss-Cutting-Threshold (**LCT**). It’s synonymous with **ALCM**.

**LCT**is the Loss-cutting threshold, which is the price point where our **ATS** automatically exits negative positions incrementally, starting from the most graved losing position.

**ALCM** is the Automated Loss-Cutting Mechanism. When the market moves beyond the **LCT**, our **ATS** will commission an Artificial Intelligence (AI) process/robot to eliminate losing trades, beginning with the most gravely negative trades.

**PrPt** is the price point, which is the distinct gold price without any decimal. For example: 1901 to 1902 is one price point.

**eTp** is the most important number. It’s the expected target price where we would take profit in the future. In long positions, eTp is higher than the current price. In short positions, eTp is lower than the current price. eTP is also the destination end of the trading range.

**ieTP** is the initial **eTP**. It improves the **TO** by reducing the risk of the market volatility moving beyond the **LCT**.

**mTp** is the opposite end of the trading range, as opposed to the **eTp**. These two numbers define the trading range.

**cP** is the current Bid price of a ticker/symbol – which in our case is GOLD or XAUUSD.

**rmTp** is the real max trading range. Before the trades, we define **mTp** as one end of the trading range, which is the max allowed trade at **mTp**. However, more than likely, the market price does not reach **mTp**, but reverse its direction and hit the **eTp**. In those cases, **rmTp** is the **real mTp**, instead of the projected allowed **mTp**.

**aP**is the accumulated positions, which is the total size of accumulated outstanding positions.

**rAEPr**is the second most important number. This is the real Average Entry Price for collective trades. The formula to calculate profit is **aL \* (eTP – rAEPr).**

**pAEPr**is the projected Average Entry Price, which is the projected/simulated variable for the **rAEPr** when trades were executed. After trades were executed, **rAEPr** will overrides this **pAEPr**.

**mAP** is the maximum average profit for each trade. After the trading range is defined by **eTp** and **mTp**, the **mAP** is the average of these two numbers.  **mAP** is based on the assumption that all the orders within the trading range will be filled. The formula is: **mAP = (eTp + mTp) / 2**.

**pAP** is the projected Average Profit for each trade. If the orders in the pre-defined trading range are only partially filled, **pAP** is the projected Average Profit should the market converges to the **eTP**.

**rAP** is the real Average Profit for each trade. If the market moves against your outstanding opened position and forces you to adjust the **eTP** to **aTP**, then the **rAP** will override the **mAP** or **pAP** (most likely the **mAP**).

**mL** is the minimum Lot size. Trading GOLD options or futures, the standard lot size (1) means 1 contract, which is 100 troy ounces of gold. You should choose a broker that offers **mL** as low as 0.01, which is 1% of a standard Lot/Contract. In effect, trading 0.01 means you trade once ounce of gold.

**mPR** is the price range. This is the number of total accumulated small trades if all the orders in the trading range should be filled.

**emP** is the expected max profit. If **mPR** and the market converge to **eTp**, then **emP** should happen.

**eP** is the expected profit. Its formula is:  **eP**=**rAP \* aP**.

**P** is the real gross profit. It is calculated as **P** =**mAP** \* **aP**.

**L** is the **leverage ratio** which shows how much the trade size is magnified as a result of the margin held by the broker. For example: 100:1 means ($100,000 / $1,000), which means you can trade $100,000 position for just $1,000 margin requirement.

**M** is the margin for opened positions. Margin can be thought of as a good faith **deposit**/**collateral** for outstanding positions. It is a “good faith” assurance that you can afford to hold the trade until it is closed. It’s not a fee or a transaction cost. It is simply a *portion* of your funds that your broker sets aside from your account balance to keep your trades open and to ensure that you can cover the potential loss of the trade.

**S** is the estimated swap fees. Swap fees are charges for overnight opened positions.

**A** is the bare minimum account equity before trades are entered in order to keep a healthy account. Its formula is: **2M** + **emP** + **S**

**C** is the cushion, which is the price point from the **mTP** to the Loss-Cutting-Threshold (**LCT**).

**cE**is the Cushion equity, which is the extra capital in the trading account to add extra cushion from the end of the trading range (**mTp**) to the **LCT**.

**hA**is the healthy account, which is when a trading account has sufficient capital to withstand all the negative unrealized losses when the market moves against you down to the Loss-Cutting-Threshold (**LCT**).

**TO** is the Trades Operation is a set of small trades within the defined range of price points.

**aTp** is the newly adjusted **eTP**. It’s the expected target price where we would exit safely to minimize the loss in the event that profits cannot be made, and even the break-even seems not to be possible. The Automated Trading System (**ATS**) provides this built-in tool.

**aE** is the after equity, which is the account equity after a successful trade operation.

**SOT**s are the Swept-out Trades. These are the trades in which you place stop losses in the neighborhood of temporary tops and bottoms, right the reversal or inflection points. In effect, right after your trades are being stopped out, the market reverses its direction.

**aLoss** is the price point distance from the **LCT** to the **Bottom** of the **TO** when longing gold.