

Baruch Traders Club - Competition

Use server **mathrit.baruch.cuny.edu** and the ports below:

1. Port 10000 - Sales & Trader

- What you are trading: Up to 4 securities named CRZY, TAME, FUBAR, BARU
- At any moment, the price of each security is equally likely to go up as down.
- The maximum trade size for any security is 15000 shares.
- You have gross and net position limits of: 250000 and 100000 respectively. Your position is aggregated across all tradeable securities.
- The securities are closed at the last traded price.
- The length of a round is 300 seconds and you can submit up to 5 orders per second. Excess orders are queued.
- Each round, the following variables for a security may change: starting price, volatility, computer liquidity, tender volume, tender price offset. You are not provided with these values ahead of time.
- Everyone receives the same number of private tenders per round (this number is a variable), but the volumes, prices, and securities may be different.
- There are also two types of auctions:
 - Above reserve: If you beat a hidden price, your order is filled.
 - Winner takes all: Only the best price will be filled.
- Risky strategies will not be considered valid.
- Profit by accepting profitable tenders and closing your position to minimize risk and by market-making.

2. Port 10001 - Options

- There is an underlying asset named RTM. At any moment, the price of this security is equally likely to go up as down. The starting price of RTM is always 49.5 and the initial volatility is always 20% annually.
- The length of a round is 600 seconds representing one month of trading and you can submit up to 5 orders per second. Excess orders are queued.
- Assume there are 240 trading days per year.
- RTM has no dividend rate and the risk-free rate is 0.
- RTM is closed at the last traded price.
- The max trade size for RTM is 10000.
- The gross and net position limit for RTM is 50000.
- You are also trading contracts of monthly call and put options with strikes 45, 46, \dots , 54 which expire at the end of the round. A contract represents 100 options.
- The name of the options has a specific format: RTM + strike price + C or P
- The max trade size for an option is 100 contracts.
- The gross and net position limit (aggregated across all options) is 2500 and 1000 respectively.
- The options market maker is ignorant of current and predicted volatilities and may make mistakes when applying the Black-Scholes model.
- You will receive news items containing current and predicted volatilities.
- A delta-limit will be imposed. Strategies that do not consider delta will not be considered valid.
- Profit from market-maker mistakes, discrepancies between implied and actual volatility, and predicted volatility shifts, while managing your delta.