Laboratory 4: Option Pricing

In this lab we will be working with Amazon stock, since it doesn’t pay dividends.

Needed Bloomberg Skills

☐ Use **OMON** to access the main option screen for an asset.
   strike after C or P
   price under **Last**
   σ under **IVM**

☐ Look up the implied volatility curve for a set of options.
   **SKEW**

☐ Superimpose data on a price graph.
   **Edit Chart**

☐ Change date range on a price graph.

☐ Use **OVME** to access the option pricing screen.
   Adjust **Exercise, Model**
   Adjust **Rate, Vol**

☐ View graphs of values.
   **Scenario**

In the questions below, “financially” just means from the viewpoint of the buyer and/or seller, as appropriate.

Assignment

1. Look up the price chart for a call option with various strikes. Discuss your results financially.
2. Look up the implied volatility for a call option with various strikes. Discuss your results financially.
3. Graph the history for a call option from now back until it was first sold. Superimpose the historical asset price for the same time period on the same graph. Discuss the behavior of the two graphs.
4. Look up the price chart for a call option with various expiration dates. Discuss your results financially.
5. Price a European option using continuous Black-Scholes with various values of the parameters listed below. In each case, discuss your results financially. Make sure you price options with the current value of $S$ in and out of the money.

(a) interest rate $r$
(b) volatility $\sigma$