Short Answer 1 (15 points): Set up the calculations to determine the Sharpe Ratio of the Cutlucent hedge fund if the standard deviation of returns on Cutlucent is 34%, the standard deviation of returns on the market is 15%, the expected return on the Cutlucent is 20%, the expected return on the market is 8%, and the risk-free interest rate is 3%.

Short Answer 2 (15 points): Assume you invest $200,000 in Starbucks which has an expected return of 12% and a standard deviation of returns of 25% and $600,000 in T-bills earning a 1% return. Set up the calculations to determine the expected return and standard deviation of returns on your portfolio.

Problem (75 points): Assume the expected return on USDefault (USD) Inc. is 8% and on Japan Airbus Lines (JAL) is 16%. Assume also that the correlation between USD and JAL is 0.1 and that the standard deviation of returns on USD is 10% and on JAL is 23%. Assume also that the return on T-bills is 2%. Assume also that you wish to construct a portfolio with a standard deviation of returns of 15%.

a. Show your optimal portfolio of USD, JAL, and T-bills and show how much better off you are than if there were no risk-free asset.

b. On the same graph, show how the expected return of your portfolio changes if the standard deviations of both USD and JAL rise by 5% and the rate on T-bills rises to 6%. Note: Be sure to clearly indicate which part of the graph answers part a) and which answers part b).

c. Because of the changes in part b), will you buy, buy and return, sell, or short-sell additional T-bills? How will the relative weights of JAL and USD change?

Wall Street Journal Questions are on the back of this page.
Wall Street Journal Bonus Questions (1 point each)

1. Why was Citigroup Inc. fined $30 million over the early release of a negative report on an Apple supplier?
   a. the report included private information from Citigroup bankers who were helping the supplier raise capital to cover losses
   b. the report included private information stolen from Apple’s supplier before they had announced the information
   c. the report was released before the SEC had approved it
   d. the report included private information regarding an upcoming quarterly sales announcement that had been obtained from the supplier’s accountant
   e. the report was released to four big investment firms before it was released to the public

2. The Wall Street Journal reports that Swiss regulators are investigating the currency market for potential
   a. failure to execute currency trades at the best possible prices
   b. insider trading
   c. failure to execute currency trades in a timely manner
   d. overcharging of commissions on currency trading
   e. rigging of widely used market benchmarks

3. According to the Wall Street Journal, many money managers think the U.S. shutdown creates an investment opening because
   a. any stock selloff would create a great buying opportunity
   b. international stocks are expected to rise if the shutdown continues
   c. the lack of new economic data will force the Federal Reserve to end its bond-buying program as planned
   d. the rising risk of default has driven down U.S. bond prices
   e. international bonds prices are expected to rise if the shutdown continues

4. What proposal on the U.S. debt have top Wall Street executives warned would pose severe risks to financial markets and the economy?
   a. paying interest on U.S. debt before other obligations such as Social Security
   b. issuing deferred interest payment vouchers instead of cash to cover interest payments
   c. paying foreign holders of U.S. debt while deferring payment to domestic bondholders
   d. paying domestic bondholders while deferring payment to foreign holders of U.S. debt
   e. extending the maturities of any debt that is coming due

5. J.P. Morgan Chase is looking to scale back lending to ______ as it seeks the elimination of relationships with companies that pose a greater risk of fraud or money laundering and are viewed as risky to J.P. Morgan's reputation.
   a. pawn shops
   b. payday lenders
   c. check cashers
   d. certain car dealerships
   e. all of the above