MATH4511 Quantitive Methods for Fixed Income Derivatives, 2015-16 Fall
Quiz 01(T1C)

Name: ____________________ **ID No.:** ____________________ **Tutorial Section:**_______

1. Consider two put options with the same underlying asset and the same maturity. Use no arbitrage principle to prove that **the price of the put option with higher strike price is greater than the one with lower strike price.**

2. Calculate the price of the following forward contract:

   underlying asset: stock of Apple Inc.
   spot price of underlying: $113.5
   number of shares: 1000
   maturity: 1 year

   Assume that the risk-free rate of interest with quarterly compounding is 8% per annum.

   Answer ____

3. The current stock price of Google Inc. is \$630. Assume that in 3 months, it will either increase by 20% with probability 45% or decrease by 10% with probability 55%. The risk-free interest rate with quarterly compounding is 8% per annum. What is the value of a 3-month European put option with the strike price of \$630?

Answer ____