EE431/438 Economics of Financial Markets and Institutions

Exercise 4: Capital Asset Pricing Model (CAPM) and Abitrage Pricing Theory (APT)

1. Suppose stock XYZ has an expected return of 12% and risk of β =1. Stock ABC has expected return of 14% and β =2. The market expected return is 11% and $r_f = 5\%$.
   (a) What is the risk premium on the market portfolio?
   (b) What is the risk premium of stock XYZ and stock ABC?
   (c) Find the equation for SML. Plot the SMLand each stock's risk-return point on one graph.
   (d) According to CAPM, which stock is overvalued and which stock is undervalued?
2. What is the difference between capital market line and security market line ?