**Problem 1**
a. Book value of debt = 300
   Annual interest expenses = 15
   Maturity of the debt = 5
   Market interest rate = 7.70%
   Market value of debt = 267.401711

b. Unlevered beta = 0.8
   Market value of equity = 1500
   D/E ratio = 0.17826781
   levered beta = 0.88556855
   Cost of equity = 9.78%

c. Cost of equity = 9.78%
   After-tax cost of debt = 4.62%
   Debt Ratio = 15.13%
   Cost of capital = 9.00%

**Problem 2**
Effect of Working capital
Increase in initial investment = -100 ! 10% of revenues
Increase in salvage value = 100 ! Recover 100% at end
NPV effect = - 100 + 100/1.12^3 = -28.8219752

Effect of expensing
Tax benefit shown in analysis = 600 ! Shown today
Depreciation each year = 500
Tax benefit each year = 200
PV of tax benefits over 3 years = 480.366254
Difference in PV = -119.633746

Corrected NPV = 100 - 28.82 - 119.63 = -48.46