**Key Formulas in Macoreconomics**

1. **GDP (Expenditure Approach)** C+I+G+Xn=GDP
2. **GDP(Income Approach)** W+I+R+P=GDP
3. **Calculating Nominal GDP:** The quantity of various goods produced in a nation times their current prices added together.
4. **\*GDP Deflator:** A price index used to adjust nominal GDP to arrive at real GDP. It’s called a deflator because nominal GDP will usually over- state the value of a nation’s out-put if there has been inflation.
5. **\*GDP Deflator=**Nominal GDP/Real GDP x 100
6. **Real GDP=** Nominal GDP/GDP Deflator x 100
7. **GDP Growth Rate:** Current years GDP- Last Year’s GDP/ Last year’s GDP x 100
8. **Inflation Rate via CPI(consumer price index):**

This yr’s CPI-Last yr’s CPI/Last yr’s CPI x 100

1. **Real Interest Rate=** nominal interest rate-inflation rate
2. **Unemployment Rate=** number of unemployed/number in the labor force x 100
3. **Money multiplier=**1/RRR
4. **Quantity theory of money; MV=PY** a monetarists view which explains how changes in the money supply will affect the price level assuming the velocity of money of money and the level of the output are fixed.
5. **MPC+MPS=1 Households may consume or save with any change in their income.**
6. **Spending Multiplier =** 1/1-MPC or 1/MPS
7. **Tax Multiplier=MPCMPS.** It tells you how much total spending will result from an initial change in the level of taxation. It’s negative because when taxes decrease, spending increases and vice versa. The tax multiplier will always be smaller than the spending multiplier.