

Need to Know Equations: SECTION 3: Measurement of Economic Performance:

$$\text{Labor force participation rate} = \frac{\text{Labor force}}{\text{Population (age 16 \& older)}} \times 100$$

$$\text{Unemployment rate} = \frac{\text{Number of unemployed workers}}{\text{Labor force}} \times 100$$

$$\text{Natural unemployment} = \text{Frictional unemployment} + \text{Structural unemployment}$$

$$\text{Actual unemployment} = \text{Natural unemployment} + \text{Cyclical unemployment}$$

$$\text{GDP} = C + I + G + IM$$

GDP = Consumer spending + Investment spending + Government spending + Net Exports (exports – imports)

$$\text{Real GDP} = \frac{\text{nominal GDP}}{\text{GDP deflator}} \times 100$$

or

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{CPI of same year}} \times 100$$

$$\text{GDP per capita} = \frac{\text{GDP}}{\text{Size of population}}$$

$$\text{Price Index in a given year} = \frac{\text{Cost of market basket in a given year}}{\text{Cost of market basket in base year}} \times 100$$

$$\text{GDP Deflator} = \frac{\text{Cost of Current Year Market Basket at Current Prices}}{\text{Cost of Current Year Market Basket at Base Year Prices}} \times 100$$

$$\text{Inflation Rate} = \frac{\text{Change in CPI}}{\text{Base year CPI}} \times 100 \quad \text{or} \quad \frac{\text{Price level in yr 2} - \text{Price level in yr 1}}{\text{Price level in yr 1}} \times 100$$

$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index (in hundredths)}}$$

$$\% \text{ Change in Real Income} = \% \text{ Change in Nominal Income} - \% \text{ Change in Price Level}$$

$$\text{Real Interest Rate} = \text{Nominal Interest Rate} - \text{Inflation Rate}$$