Solution to Chapter 2, Question I
STUDY GUIDE

Consider an economy with a widget producer, consumers and a government. The widget producer, produces 100 millions widgets which sell at a market price of $5 per widget. 70 million widgets are purchased by consumers, 10 million are sold to the government and the remainder is stored as inventory. The widget producer pays $150 million in wages and $40 million in taxes. Consumers pay $30 million in taxes. The government spends all tax revenues to hire workers and purchase widgets as an intermediate good into the production of public infrastructure. The widgets total $50 million and wages total $20 million. Calculate GDP using the product approach, expenditure approach and income approach.

GDP Using the Product Approach	
Value added – producers	**$500**
Value added - government	**$20 ←- We did not add this in Class**
GDP	**$520**

GDP Using the Expenditure Approach	
Consumption	**$350**
Investment	**$100 ← Value of Inventories**
Government Expenditures	**$70**
Net Exports	**$0**
GDP	**$520**

GDP Using the Income Approach	
After-Tax Wage Income	**$140**
After-Tax Profits	**$310 ← including the value of Inventories as we did in class**
Interest Income	**$0**
Taxes	**$70**
GDP	**$520**