Chapter 1: The Science of Macroeconomics

Macroeconomics is the study of economy as a whole.

Discuss Figure 1-1 on page 5
Real GDP measures the total income of everyone in the country. Real GDP per person measures the income of average person in the country (or standard of living).

Q1: What is the variable on the vertical axis?
Q2: What does 2000 dollars mean?
Q3: What happened during World War II?
Q4: What is the effect of 9/11 terrorist attack on economy?
Q5: Can you get the latest data and update Figure 1-1?
Q6: What are recession and depression?

Discuss Figure 1-2 on page 6

The inflation rate measures the percentage change in the average level of prices from the year before.

Q7: What is the difference between inflation and deflation?
Q8: What is the recent average yearly inflation rate?
Q9: Are you happy if your boss suggests a 2% rise in your annual salary?
Q10: Are you happy if the bank asks for an annual mortgage rate of 3%?
Discuss Figure 1-3 on page 7

The unemployment rate measures the percentage of people in the labor force who do not have jobs.

Q11: What happened to unemployment rate recently?

How do economists think?

Economists use models. The inputs of models are exogenous variables, and outputs are endogenous variables. Exogenous variables are given. Endogenous variables are to be explained by models.

Example:

The demand-and-supply model:

The demand equation is____________________

The supply equation is____________________

The market-clearing (equilibrium) condition is________

Exogenous variables are____________________

Endogenous variables are____________________

How to solve for endogenous variables:

Method 1: use math, and solve the system of equations.
Method 2: use graph, and find the intersection of demand and supply curves.

The two methods yield the same answers.

**Comparative Statics** studies how the change in the exogenous variable affects the endogenous variable. Comparative statics can be undertaken either mathematically or graphically.

Example: show how rising income affects the market-clearing price and quantity.

Remarks:

A model simplifies reality.

A model is only as good as its assumptions. Most macroeconomists assume price is sticky in short run, but flexible in long run.

An assumption that is good for some purposes may be misleading for others.

There is no single correct model that applies to all situations.

The prediction from a good model should be consistent with observed facts.