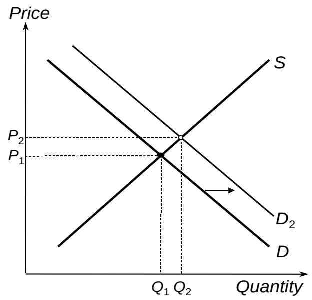
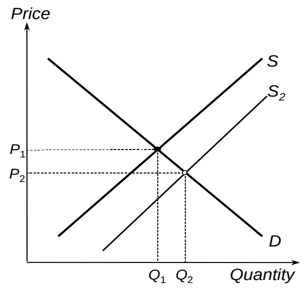
Answers to Tutorial 4
Market Equilibrium and Government Control

1. How will the following changes affect the market price of wheat flour (assuming that the market is initially in equilibrium)? In each case, sketch what happens to the demand and/or supply curves and, as result, what happens to the equilibrium price.

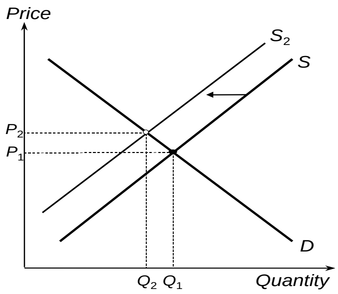
(a) People consume more bread.
Demand right shift, higher EP



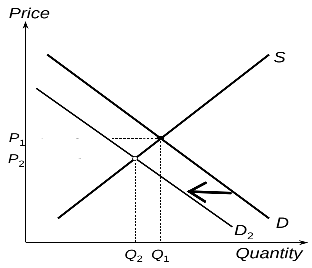
(b) The discovery of a new cheaper way of milling flour. ***Supply right shift, lower EP***



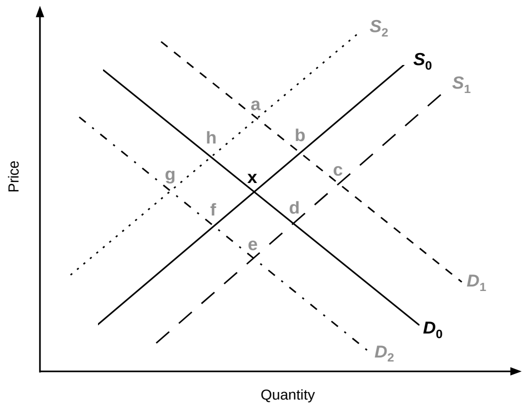
(c) The prices of wheat grains rise.
Supply left shift, higher EP



(d) Rice and potatoes fall in price.
Demand left shift, lower EP



2. The diagram below shows the demand for and supply of petrol. The market is initially in equilibrium at point *x*. There is then a shift in the demand and/or supply curves, with a resulting change in equilibrium price and quantity. To which equilibrium point (a, b, c, d, e, f, g or h) will the market move from point x after each of the following changes?



The market for petrol

(a) A rise in the cost of refining petrol. .... ***h***
(b) A fall in bus and train fares. .... ***f***
(c) A fall in the price of crude oil and an increase in the price of cars. .... ***e***
(d) A rise in tax on petrol and a reduction in tax on cars. .... ***a***

3. Government Intervention
(a) Why does government intervene?
Government may intervene in the market to:

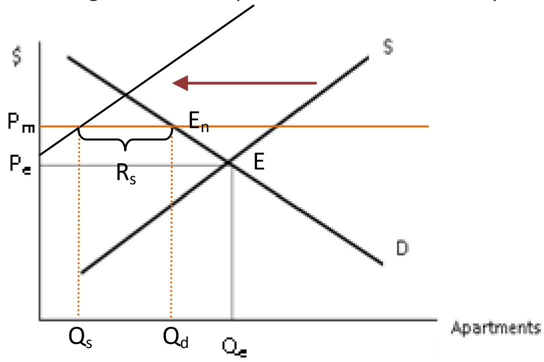
- ***achieve equity in the distribution of resources or wealth***
- ***correct a market inefficiency (e.g. monopoly)***
- ***because there are sectors/groups that are unhappy with free market results***

(b) What are the three ways in which government intervenes in the economy?
Price Controls, Quantity Controls, Process Controls (Regulation)

(c) What are the effects of government intervention?

- **Shortage**
- **Surplus**
- **Correct unbalanced distribution of income and resources**
- **Social welfare**

4. With the goal of making apartments more affordable to citizens, the government implements rent control and sets the legal maximum price at Pm above the equilibrium price as shown in the graph below.



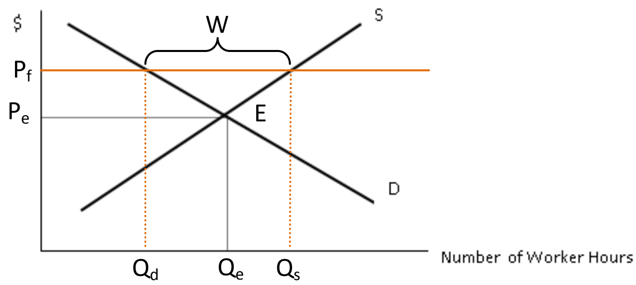
a. What kind of price control is used here by the government? .... **Price Ceiling**

b. What is the effect of this price control on the market?.................. **Non-binding price celing which has no effect**

c. What happens when there is a shortage of cement and building materials while price control was implemented?

(1) The Supply curve will shift to the left (decrease in supply) because it becomes more expensive to build apartments. (2) This will make the price ceiling binding because the P_m is now below the new equilibrium price. (3) This will result in a shortage of appartments represented by R_s because there is more demand for apartments compared to quantity supplied (Qd > Qs) created by the Price Ceiling (Rent Control).

5. In the graph below, the government sets the minimum wage (price floor) at price Pf.



(a) This price floor is (***binding***/non-binding).

(b) In a binding price floor, the legal minimum price is set (below/***above***) the equilibrium price.

(c) What type of disequilibrium (if any) occurs at W because of the minimum wage?

The disequlibrium at Pf is unemployment from the surplus of manpower created by the price floor (minimum wage). This is because at the price floor Pf, quality supplied of manpower by households (Qs) is less than what is required by firms (Qd), (Qs < Qd). The surplus or unemployment is represented by W.

(d) What happens to the actual number of worker hours that firms are willing to hire compared to the free market number of worker hours?

Because of the price ceiling, firms are less willing to hire more worker hours. Thus, the actual number of workers hours that firms are willing to hire with the price control is lower that the amount that could be achieved if there was a free market (no government intervention) as evidenced by $Q_e > Q_d$