Answers to Questions for Review

3.1  (a) A rise in the price of a substitute shifts $D$ to the right, causing an excess demand, so the price rises; at the new price, the quantity traded will be more than at the start.

(b) A rise in the price of an input shifts $S$ to the left, causing an excess demand, so the price rises; at the new price, the quantity traded will be less than at the start.

(c) A rise in the price of a complement shifts $D$ to the left, causing an excess supply, so the price falls; at the new price, the quantity traded will be less than at the start.

(d) A rise in the number of suppliers shifts $S$ to the right, causing an excess supply, so the price falls; at the new price, the quantity traded will be more than at the start.

(e) $D$ shifts to the right and $S$ shifts to the left, causing an excess demand, so the price rises; the new quantity traded may be greater or less than before, depending on where the two new curves intersect.

(f) Both $D$ and $S$ shift to the left, so there may be an excess demand or an excess supply, depending on which curve shifts more, so the price may rise or fall; the quantity traded will be less than at the start.

3.2  (a) A rise in the number of firms shifts $D$ for bar staff to the right, causing an excess demand, so the wage rises; at the new wage, more hours are worked than at the start.

(b) The introduction of a substitute input shifts $D$ for bar staff to the left, causing an excess supply, so the wage falls; at the new wage, fewer hours are worked than at the start.
(c) A rise in the wage for an alternative occupation shifts $S$ for bar staff to the left, causing an excess demand, so the wage rises; at the new wage, fewer hours are worked than at the start.

(d) The college expansion will probably increase the demand for the output of bars, which will shift the $D$ for bar staff to the right. The expansion will probably also raise the number of people willing to work as bar staff and so shift $S$ for bar staff to the right. There may be an excess demand or an excess supply, depending on which curve shifts more, so the wage may rise or fall, but more hours will be worked than at the start.